DOCTOR OF PHILOSOPHY

A fresh approach to international law in the field of sustainable development what lessons from the law of international water courses?

Rieu-Clarke, Alistair Stephen

Award date:
2004

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2004

University of Dundee

A Fresh Approach to International Law in the Field of Sustainable Development – What Lessons from the Law of International Watercourses?

Alistair Stephen Rieu-Clarke

PhD International Water Law and Policy
International Water Law Research Institute
University of Dundee

February 2004

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ACKNOWLEDGEMENTS

I am extremely grateful to many friends and colleagues for their support throughout my PhD studies.

I could not have asked for a better supervisor than Dr Patricia Wouters. Dr Wouters provided me with the best advice I could have asked for and, through her own academic and personal achievements, was a tremendous source of inspiration. I am grateful to my friends and colleagues at the International Water Law Research Institute, University of Dundee. In particular Patricia Jones, Andrew Allan and Dinara Mackins supported my PhD studies more than they probably realise. I am also thankful for the many useful suggestions and critical comments that I received from my fellow PhD students and staff at the Law Faculty's PhD Seminar, and especially to those students who were involved in my "mock viva" – a far tougher ordeal than the actual viva! The critical comments I received from my examiners, Stephen McCaffrey and Sergei Vinogradov, were extremely useful and I thank them for taking the time to consider my PhD thesis and provide me with such excellent feedback.

I am thankful to the University of Dundee for awarding me with one of their coveted University Scholarships, which allowed me to pursue my PhD studies full-time.

To my friends, for providing me with the many welcome distractions from my studies, I owe a huge debt of gratitude. In particular, I am grateful to my close friends living in and around Dundee during my studies.

I am hugely indebted to my Mum and Dad for their support throughout my life. They have never doubted my ability to do whatever I wanted to do and have always given me their support. I could not have asked for more. However, the person to whom I owe the biggest debt of gratitude is to my best friend and future wife, Angela. Not only did she provide me with many helpful comments relating to my thesis, she was, and remains, a great source of inspiration.

Signed Declaration for Submission of Postgraduate Theses

I, the candidate, hereby acknowledge:

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THESIS ABSTRACT

Implementing the goal of sustainable development has long been heralded as the means by which the needs of both present and future generations can be met. However, finding a long-term balance between economic, social and environmental interests, the basic tenet of sustainable development, has proved largely illusive in practice. This thesis shows that, while a number of "legal frameworks for sustainable development" have been proposed at the international level, they fail to fully capture the essence of sustainable development and international law's capacity to support its implementation.

Through a study of the law of international watercourses the thesis shows that a sophisticated legal mechanism, comprised of key substantive and procedural rights and obligations between States, exists to reconcile competing economic, social and environmental interests. Moreover, the thesis illustrates how the basic approach taken by the law of international watercourses can be used as a model for further developing international law in the field of sustainable development.

The thesis is divided into four sections. The first section includes an overview of the topic area and an understanding of international law. In section two the thesis explores the meaning of sustainable development and considers the term's relationship with international law. A detailed analysis of how the law of international watercourses seeks to reconcile competing economic, social and environmental interests is carried out in section three. The thesis concludes with a fourth section advocating the need for a fresh

approach to international law and sustainable development and offering the foundations for this fresh approach based on lessons learnt from the law of international watercourses.

ABBREVIATIONS

1987 WCED Principles	WCED Legal Principles on Environmental Protection and Sustainable Development
1992 Helsinki Convention	Convention on the Protection and Use of Transboundary Watercourses and International Lakes
1995 UN CSD Principles	UN CSD Report of the Expert Group Meeting on Identification of Principles of International Law for Sustainable Development
1997 UN Watercourses Convention	Convention on the Law of the Non-Navigational Uses of International Watercourses
2000 IUCN Covenant	IUCN Draft Covenant on Environment and Development
2002 ILA Declaration	2000 ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development
Add.	Addendum
Alb.	Albania
All E.R.	All England Reports
Am. J. Int'l L.	American Journal of International Law
Am. Soc'y Int'l L. Proc.	American Society of International Law Proceedings
Am. U. Int'l L. Rev.	American University International Law Journal
Am. U. J. Int'l L. & Pol'y	American University Journal of International Law and Policy
Ann. Dig.	Annual Digest
Ann. Surv. Int'l & Comp.	Annual Survey of International and Comparative Law
Apr.	April
Ariz. J. Int'l & Comp. L.	Arizona Journal of International and Comparative Law
ASIL	American Society of International Law
Aug.	August
Austrian J. Publ. Int'l L	Austrian Journal of Public International Law
Belg.	Belgium
Berkeley J. Int'l L.	Berkeley Journal of International Law
Bots.	Botswana
Brit. Y.B. Int'l L.	British Yearbook of International Law
Buff. Hum. Rts. L. Rev.	Buffalo Human Rights Law Review
B.U. Int'l L.J.	Boston University International Law Journal
BYU J. Pub. L.	Brigham Young University Journal of Public Law
Cal. W. Int'l L. J.	Californian Western International Law Journal
Can.	Canada
Can. Y.B. Int'l L.	Canadian Year Book of International Law

Cardozo J. Int'l & Comp. L.	Cardozo Journal of International and Comparative Law
Case W. Res. J. Int'l L.	Case Western Reserve Journal of International Law
CEPMLP	Centre for Energy, Petroleum and Mineral Law and Policy
Chi. J. Int'l L.	Chicago Journal of International Law
Colo. J. Int'l Envtl. L. & Pol'y	Colorado Journal of International Environmental Law and Policy
Colum.	Columbia
Colum. J. Transnat'l L.	Colombia Journal of Transnational Law
Conn. J. Int'l L.	Connecticut Journal of International Law
Corr.	Corrigendum
Czech.	Czechoslovakia
Dec.	December
Den.	Denmark
Denv. J. Int'l L. & Pol'y	Denver Journal of International Law and Policy
DFID	Department for International Development
Duke J. Comp. & Int'l L.	Duke Journal of Comparative and International Law
Duke L.J.	Duke Law Journal
Ed.	Editor/ Edition
Ecology L.Q.	Ecology L.Q.
Envtl. L. Rep.	Environmental Law Reporter
Envtl. Lawyer	Environmental Lawyer
Envtl. Pol'y & L.	Environmental Policy and Law
Eth.	Ethiopia
Eur. J. Int'l L.	European Journal of International Law
Eur. L. Rev.	European Law Review
FAO	Food and Agricultural Organisation
Feb.	February
Fordham L. Rev.	Fordham Law Review
Fr.	France
FRG	Federal Republic of Germany
Ga. J. Int'l & Comp. L.	Georgia Journal of International and Comparative Law
Ga. L. Rev.	Georgia Law Review
G.A. Res.	United Nations General Assembly Resolution
Geo. Int'l Envtl. L. Rev.	Georgetown International Environmental Law Review
Ger.	Germany
Great Plains Nat. Resouces J.	Great Plains Natural Resources Journal
Harv. Int'l L. J.	Havard International Law Journal
Hastings Int'l & Comp. L. Rev.	Hastings International Law and Comparative Law Review
Hastings West-Northwest J. of	Hastings West-Northwest Journal of Environmental
Hung.	Hungary
Envtl. L. & Pol'y	Law and Policy

I.C.J.	International Court of Justice/ International Court of Justice Reports
ILA	International Law Association
ILC	International Law Commission of the United Nations
I.L.M.	International Law Materials
ILSA J. Int'l & Comp. L.	International Law Students Association Journal of International and Comparative Law
Int. J. Marine & Coastal L.	International Journal Marine and Coastal Law
IUCN	International Union for the Conservation of Nature and Natural Resources
IWLRI	International Water Law Research Institute
IWRA	International Water Resources Association
Ind. J. Global Legal Stud.	Indiana Journal of Global Legal Studies
Int'l & Comp. L.Q.	International and Comparative Law Quarterly
Int'l J. Water Resources Dev.	International Journal of Water Resources Development
Int'l L. Rpt.	International Law Report
IWRM	Integrated Water Resource Management
J. Envtl. L & Litigation	Journal of Environmental Law and Litigation
Jan.	January
Jul.	July
Jun.	June
J.L. & Com.	Journal of Law and Commerce
J. of Soil & Water Conservation	Journal of Soil and Water Conservation
J. Land, Resources & Envtl. L.	Journal of Land, Resources and Environmental Law
Leiden J. Int'l L.	Leiden Journal of International Law
Liber.	Liberia
Mar.	March
Melb. U.L. Rev.	Melbourne University Law Review
Mich. J. Int'l L.	Michigan Journal of International Law
Minesota L. Rev.	Minnesota Law Review
Namib.	Namibia
Nat. Resources F.	Natural Resources Forum
Nat. Resources J.	Natural Resources Journal
Neth.	The Netherlands
Neth. Int'l L. Rev.	Netherlands International Law Review
Neth. Y.B. Int'l L	Netherlands Yearbook of International Law
Nicar.	Nicaragua
NIEO	New International Economic Order
No.	Number
Nor.	Norway
North Dakota L. Rev.	North Dakota Law Review
North Carolina J. Int'l L. & Com. Reg.	North Carolina Journal of International Law and Commercial Regulation
Nov.	November

N.Y. St. B.J.	New York State Bar Journal
N.Y.U. Envtl. L.J.	New York University Environmental Law Journal
N.Y.U.J. Int'l L. & Pol.	New York University Journal of International Law and Policy
N.Y.L. Sch. L. Rev.	New York Law School Law Review
N.Y.L. Sch. J. Hm. Rts.	New York Law School Journal of Human Rights
N.Z.	New Zealand
O.E.C.D.	Organisation for Economic Co-operation and Development
O.J.	Official Journal of the European Union
P.C.I.J.	Permanent Court of International Justice
Plen. mtg.	Plenary meeting
Pol.	Poland
Proc. Am. Soc. Int'l L.	Proceedings of the American Society of International Law
Q.B.	Queen's Bench
Resources Pol'y	Resources Policy
Rev. Eur. Comm. & Int'l Envtl. L.	Review of European Community and International Environmental Law
R.I.A.A.	United Nations Reports of International Arbitral Awards
Rio Declaration	Declaration of the United Nations Conference on Environment and Development
S. Afr.	South Africa
Sep.	September
Sess.	Session
SIWI	Stockholm International Water Institute
Slovak.	Slovak Republic
Spec.	Special
Stan. J. Int'l L.	Stanford Journal of International Law
Stockholm Declaration	Declaration of the UN Conference on the Human Environment
Suffolk Transnat'l L.	Suffolk Transnational Law
Supp.	Supplement
Swed.	Sweden
TAC	Technical Advisory Committee
Temp. Int'l & Comp. L.J.	Temple International and Comparative Law Journal
Tex. Int'l L.J.	Texas International Law Journal
Transnat'l L. & Contemp. Probs.	Transnational Law and Contemporary Problems
Tul. L. Rev.	Tulane Law Review
Turk.	Turkey
U. Arkansas at Little Rock L. Rev.	University of Arkansas at Little Rock Law Review
UCLA L. Rev.	University of California Law Review
U. Den. Water L. Rev.	University of Denver Water Law Review
U.K.	United Kingdom
U.N.	United Nations

UNCSD	United Nations Commission on Sustainable Development
UNCED	United Nations Conference on Environment and Development
UN Charter	Charter of the United Nations
U.N. Doc.	United Nations Document
UNDP	United Nations Development Programme
U.N. ECE	United Nations Economic Commission for Europe
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educations, Scientific and Cultural Organisation
UNGAOR	United Nations General Assembly Official Records
Uni. Toledo L. Rev.	University of Toledo Law Review
U.N.T.S.	United Nations Treaty Series
U. Pa. J. Intl Econ. L.	University of Pennsylvania Journal of International Economic Law
U.S.	United States
U.S. Mex. L. J.	United States-Mexico Law Journal
Va. J. Int'l L.	Virginia Journal of International Law
Vand. J. Tranat'l L.	Vanderbilt Journal of Transnational Law
Vill. Envtl. L.J.	Villanova Environmental Law Journal
Vol.	Volume
Vt. L. Rev.	Vermont Law Review
Wash. L. Rev.	Washington Law Review
Water Int'l	Water International
Water L.	Water Law
Water Pol'y	Water Policy
WCED	World Commission on Environment and Development
WHO	World Heritage Organisation
Wis. Int'l L.J.	Wisconsin International Law Journal
WTO	World Trade Organisation
WWF	World Wildlife Fund
Yale J. Int'l L.	Yale Journal International Law
Y.B. Int'l Envt'l L.	Yearbook of International Environmental Law
Y.B. Int'l L. Comm'n	Yearbook of the International Law Commission

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INTRODUCTION

"We must spare no effort to free all of humanity, and above all our children and grandchildren, from the threat of living on a planet irredeemably spoilt by human activities, and whose resources would no longer be sufficient for their needs" (2000 UN Millennium Declaration[1])

"…of all the social and natural resource crises we humans face, the water crisis is one that lies at the heart of our survival and that of our planet Earth." (2003 UN World Water Development Report[2])

1. Meeting the Needs of Present and Future Generations

A number of global challenges threaten humanity's ability to meet the needs of both present and future generations. Almost half of the world's population is afflicted by poverty.[3] Despite significant efforts economic growth *for all* has proven illusive[4] and the

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[1] *United Nations Millennium Declaration*, G.A. Res. 55/2, U.N. GAOR, 55th Sess., 8th Plen. Mtg., Agenda Item 60(b), para. 21, U.N. Doc. A/Res/55/2 (2000), <http://www.un.org/millennium/declaration/ares552e.htm>, (last visited Jun. 13, 2003).

[2] UNESCO, *et al.,* Water for People, Water for Life – UN World Water Development Report (UNESCO Publishing, Paris 2003), at 4.

[3] 2.8 billion people live on less than US$ 2 a day, while 1.2 billion live on less than US$ 1 a day (UNDP, *Human Development Report 2002 – Deepening Democracy in a Fragmented World* (Oxford University Press, Oxford 2002), at 18. The World Bank defined poverty as, "…pronounced deprivation in well-being…. To be poor is to be hungry, to lack shelter and clothing, to be sick and not cared for, to be illiterate and not schooled (World Bank, *World Development Report 2000/2001 – Attacking Poverty* (Oxford University Press, New York 2001), at 15. Poverty related statistics are alarming: there are around five

world's natural resources and supporting ecosystems are arguably under greater pressure now than ever before.[5]

How can humanity address the many economic, social and environmental issues that hinder its ability to meet the needs of present and future generations? One solution that received almost universal support is to implement sustainable development.[6] What is

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million preventable deaths each year due to lack of access to clean water and adequate sanitation services (UNESCO, *supra* note 2, at 4). Three million people die annually from HIV/AIDS (UN AIDS & WHO, *Aids Epidemic Update – December 2002*, <http://www.unaids.org/worldaidsday/2002/press/Epiupdate.html>, (visited Apr. 27, 2003); 854 million adults were illiterate at the start of the millennium (Human Development Report 2002, *id.,* at 10); one in every five people in the developing world is chronically undernourished; and each year 8.8 million people die as a result of hunger (FAO, *The State of Food Security in the World 2002 – When People Must Live With Hunger and Fear Starvation* (FAO, Rome 2002), <http://www.fao.org/DOCREP/005/Y7352E/y7352e00.hem>, (visited Apr. 27, 2003).

[4] While average income per capita in developing countries grew from US$ 989 in 1980 to $1, 354 in 2000, regional economic problems and the vast inequities between rich and poor prevail (World Bank, *World Development Report 2003 – Sustainable Development in a Dynamic World, Transforming Institutions, Growth, and Quality of Life* (Oxford University Press, Oxford 2002), at 1); In Sub-Saharan Africa for example, twenty-three countries representing more than half of the region's population are poorer now than in 1975, and the world's richest one percent of people receives as much income as the poorest fifty-seven percent (Human Development Report 2002, *supra* note 3, at 10) .

[5] The environment is experiencing stress due largely to a growing world population and greater demand for natural resources. Total world population in 1950 was estimated at 2.5 billion, in 2000 it had increased to around 6 billion, and by 2015 it is predicted to reach 7 billion (UN Population Division, *World Population Prospects: The 2002 Revision* (United Nations, New York 2002)). Among the challenges posed by human activities are the release of pollutants into watercourses which can make the water unfit to meet human and ecological needs; the release of sulphur dioxide and nitrous oxides into the atmosphere leading to acid rain; the depletion of the Earth's ozone layer ultimately leading to increased rates of skin cancer, eye cataracts and immune deficiency; the release of carbon dioxide by burning fossil fuels which may increase the Earth's temperature and so alter weather patterns and ocean levels, and the overexploitation of living marine resources and the use of oceans to deposit waste (*See generally,* UNEP, *Global Environmental Outlook 3 – Past, Present and Future Perspectives* (Earthscan Publications Ltd., London 2002)).

[6] Johannesburg Declaration of the World Summit on Sustainable Development, Report of World Summit on Sustainable Development, Johannesburg, South Africa, Aug. 26 – Sep. 4, 2002, at 1, U.N. Doc. A/Conf.199/20 (2002), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003), Paragraph one of the Declaration reads: "We, the representatives of the peoples of the world, assembled at the World Summit on Sustainable Development in Johannesburg, South Africa from 2-4 September 2002, reaffirm our commitment to sustainable development." In 1995, the UN General Assembly stated that, "a consensus has emerged, *inter alia*, that economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development, which is the framework of our efforts to achieve a higher quality of life for all people" (*Declaration on the Occasion of the Fiftieth Anniversary of the United Nations*, G.A. Res. 50/6,

"sustainable development"?[7] "Development" has been defined as the constant improvement in the economic and social well-being of all individuals.[8] The most commonly used definition of *sustainable* development is, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[9] Based on the definitions above, meeting two key interrelated objectives becomes essential for the attainment of sustainable development - constantly improving the quality of human life, especially the poor (inclusive of the lives of both present and future generations), and ensuring that humanity lives within the carrying capacity of the Earth's natural resource base and its supporting ecosystems.

Progress towards implementing these essential objectives of sustainable development has been slow. In 1992, the leaders of the international community came together at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, "to recommend measures to be taken at the national and international levels to protect and enhance the environment…through the development and implementation of policies of sustainable and environmentally sound development with special emphasis on incorporating environmental concerns in the economic and social process."[10] Ten years later it was conceded that, "progress …has been slower than anticipated, and in some

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U.N. GAOR, 50th Sess., 40th Plen. Mtg., Agenda Item 29, U.N. Doc. A/RES/50/49 (1995), <http://www.un.org/UN50/dec.htm>, (visited Jun. 13, 2003)).

[7] *See infra* chapter three, for a detailed analysis of the meaning of sustainable development.

[8] *See* Article 1(1) of UN GA Res 41/128, Declaration on the Right to Development, Dec. 4, 1986, *in* Raushcing, D., *et al., Key Resolutions of the United Nations General Assembly 1946-1996*, 241 (Cambridge University Press, Cambridge 1997).

[9] WCED, *Our Common Future* (Oxford University Press, Oxford 1987), at 43.

respects conditions are actually worse than they were ten years ago."[11] Therefore, while the idea of sustainable development receives almost universal support problems remain in its implementation.

2. The Role of International Law in Implementing Sustainable Development

UNCED envisaged an important role for international law in the implementation of sustainable development.[12] A fundamental aim of developing international law was to "clarify and strengthen the relationship between existing international instruments and agreements in the field of environment and relevant social and economic agreements or instruments, taking into account the special needs of developing countries."[13] Accordingly, Principle 27 of the Rio Declaration called for "the further development of international law in the field of sustainable development,"[14] while Agenda 21 expressed a need for the review and development of international law in order "to evaluate and to

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[10] *United Nations Conference on Environment and Development*, G.A. Res. 44/228, U.N. GAOR, 44th Sess., 85th Plen. Mtg., U.N. Doc. A/RES/44228 (1989), <http://www.un.org/documents/ga/res/44/ares44-228.htm>, (visited Jun. 13, 2003)., section I(15)(c).

[11] *Implementing Agenda 21, Report by the Secretary-General,* U.N. Commission on Sustainable Development, 2nd Sess., U.N. Doc. A/CN.17/2002/PC.2/7 (2001), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003).

[12] On the role of law in development Shihata states that, "development was long seen as a function of economics and engineering. More recently, social scientists, political scientists and environmentalists have started to play an increasingly important role in what has come to be called "sustainable development". For development to be truly sustained, however, it has to be a comprehensive process in which all disciplines and professions fully participate. Law, in particular, as the formal instrument for orderly change in society, plays a pivotal role, even though this role has not always been readily recognized" *in* Seidman, A., Seidman, R.B. & Wälde, T.W., *Making Development Work: Legislative Reform for Institutional Transformation and Good Governance* xvii (Kluwer Law International, The Hague, 1999), at xvii.

[13] *Agenda 21: A Programme for Action for Sustainable Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development*, Annex II, U.N. Doc. A/Conf.151/26 (Vol. II) (1992), para. 39.2.

[14] Declaration of the UN Conference on Environment and Development, Rio de Janeiro, Brazil, Jun. 13, 1992, in Report of the United Nations Conference on Environment and Development, Annex I, U.N. Doc. A/Conf.151/26 (Vol. I), reprinted in 31 I.L.M. 876 (1992).

promote the efficacy of that law and to promote the integration of environment and development policies through effective international agreements or instruments."[15] The need to continue to develop international law in the field of sustainable development was reiterated by the UN General Assembly in 1997, which stated that "it is necessary to continue the progressive development and, as and when appropriate, codification of international law related to sustainable development."[16]

Various studies have sought to "further develop international law in the field of sustainable development" – they include the 1987 Principles on Environmental Protection and Sustainable Development,[17] the 1995 UN CSD Principles of International Law of Sustainable Development,[18] the 2000 IUCN International Covenant on Environment and Development,[19] and the 2002 ILA New Delhi Declaration of Principles of International

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[15] Agenda 21, *supra* note 13, at para. 39.2.

[16] *Programme for the Further Implementation of Agenda 21,* G.A. Res. S/19-2, U.N. GAOR, 19th Spec. Sess., 11th Plen. Mtg., Agenda Item 8, U.N. Doc. A/Res/S-19/2 (1997), para. 109: "Taking into account the provisions of chapter 39, particularly paragraph 39.1, of Agenda 21, it is necessary to continue the progressive development and, as and when appropriate, codification of international law related to sustainable development. Relevant bodies in which such tasks are being undertaken should cooperate and coordinate in this regard."

[17] 1987 WCED Legal Principles on Environmental Protection and Sustainable Development, *in* Munro, R.D. & Lammers, J.G., *Environmental Protection and Sustainable Development – Legal Principles and Recommendations* (Graham & Trotman, London 1986). The legal principles were adopted by an independent committee of experts in environmental law, convened under the auspices of WCED.

[18] UN DPCSD, Report of the Expert Group Meeting on Identification of Principles of International Law for Sustainable Development, Geneva, Switzerland, Sept 26-28, 1995 <http://www.un.org/esa/sustdev/law.htm>, (visited May 8, 2002). The Expert Group was convened in by the secretariat of the UN Commission on Sustainable Development, with the objective, "to identify basic principles and concepts of international law for sustainable development, consider possible classifications of such principles and concepts, and assess their potential practical implications in a legal context, including their role in the interpretation and application of existing international law in the field. Twenty-nine independent legal experts met.

[19] 2000 IUCN Draft Covenant on Environment and Development (2nd Ed. IUCN, Gland 2000). The IUCN Draft Covenant is the result of a long gestation period which was originally presented to the UN in 1995 on the occasion of its fiftieth anniversary, and later revised in 2000, with the hope that the covenant would be

Law Relating to Sustainable Development.[20] However, this thesis will show that these studies and other works relating to sustainable development and international law can be criticised for their lack of normative content, and general failure to take due account of the opinions of States. Having criticised previous approach to the development of international law in the field of sustainable development, this thesis will go on to offer an alternative approach based on lessons drawn from the law of international watercourses.

3. Why the Law of International Watercourses?

The law of international watercourses provides a useful "case study" for advancing international law in the field of sustainable development due to a number of reasons.

The law of international watercourses, like sustainable development, focuses on reconciling economic, social and environmental interests. The reason that the law of international watercourses focuses on reconciling economic, social and environmental interests is due to the importance and unique nature of water. The world's finite[21] and

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used to negotiate a global treaty on environmental conservation and sustainable development. Over 90 world renowned legal experts contributed to the draft Covenant, all in their individual capacity.

[20] 2000 *ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development,* 2002, adopted at the 70th conference of the ILA, New Delhi, India, Apr. 6, 2002, <http://www.ila-hq.org/>, (visited Jun. 13, 2003). The ILA Committee was established in 1992 with the remit to identify and elucidate principles, norms and rules of international law, both existing and emerging, which would constitute, "a normative framework for sustainable development." Around 45 independent legal experts where members of the ILA Committee on Legal Aspects of Sustainable Development. *See also* Earth Charter, Jun. 29, 2000, <http://www.earthcharter.org/earthcharter/charter.htm>, (visited Jun. 13, 2003); Sands, P., "International Law in the Field of Sustainable Development", 65 Brit. Y.B. Int'l L. 303 (1994).

[21] The total amount of water in the world's hydrosphere is estimated to remain constant at around 1.38 billion cubic kilometres (Jones, J.A.A., *Global Hydrological – Processes, Resources and Environmental Management* (Longman Ltd, Essex 1997), at 22). The majority of water is found in the world's oceans and is saline, estimated at around 1.35 billion cubic kilometres. Around 35 thousand cubic kilometres is

renewable[22] supply of water resources is fundamental to social and economic development and essential for sustaining ecological systems.[23] Water plays a central role in meeting basic human needs and can play a major role in alleviating poverty.[24] For example, the provision of water and sanitation services can result in a significant improvement to people's health. All types of economic development are also strongly reliant on water. Agriculture accounts for the largest use of water, while industries such as chemical production, paper making, mining and energy production, all rely on the consumption of large quantities of water. In addition, the use of water to sustain ecological systems contributes significantly towards numerous natural goods and services, such as the maintenance of fisheries and biodiversity, flood protection, domestic and agricultural waste disposal, nutrient cycling and the restoration of soil fertility.[25] Reconciling competing economic, social and environmental interest becomes essential if all the above, and many more, important uses of water are to be met.

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freshwater, 68.7 per cent of which is ice and permanent snow cover in the Antarctic, the Artic and mountainous regions, 29.9 per cent is groundwater and 0.26 percent is found in lakes, reservoirs and river systems (Saeijs, H.L.F. & Berkel, M.J., "The Global Water Crisis: The Major Issue of the Twenty-first Century, a Growing and Explosive Problem," *in* Brans, E.H.P. *et al*, eds., *The Scarcity of Water Emerging Legal and Policy Responses,* 3 (Kluwer Law International, London 1997), at 6).

[22] All types of waters are renewable, although the rates of renewal differ considerably. The renewal rate for water found in rivers is around 16 days, while the renewal period for glaciers, groundwater, ocean water and the largest lakes can run to hundreds and thousands of years (Shiklomanov, I.A., "Appraisal and Assessment of World Water Resources," 25 Water Int'l (2000), 11).

[23] *See Water: A Key Resource for Sustainable Development, Report of the Secretary-General*, U.N. Commission on Sustainable Development, Organisational Sess., U.N. Doc. A/CN.17/2001/PC/17 (2001), <http://www.un.org/esa/sustdev/sdissues/water/water_documents.htm>, (visited Jun. 13, 2003).

[24] *See* DFID, *Addressing the Water Crisis – healthier and more productive lives for poor people,* March 2001, <www.dfid.gov.uk>, (visited Jun. 18, 2003).

[25] Revenga, C., *et al*., "Pilot Analysis of Global Ecosystems – Freshwater Systems (World Resources Institute, Washington D.C. 2000), at 11.

The need to reconcile competing economic, social and environmental interests in water is exacerbated by the current world water crisis. Although water is renewable, regional variability,[26] increased demand[27] and misuse[28] have placed significant pressure on this finite resource.[29] The extent of the problem is great. Forty-one percent of the world's population, or 2.3 billion people, currently live in river basins under water stress, and some 1.7 billion people live in areas of severe water stress.[30] In areas suffering from water stress, economic and social development can be significantly curtailed and the environment may suffer unless adequate financial resources are available, in order to benefit from new technologies in water use, conservation and recycling.

A further key characteristic of water which makes it a useful case study is water's indivisibility. The nature of the hydrological cycle means that all types of water on earth interact closely as water continuously moves from ocean and land, to the atmosphere, and back again.[31] The indivisibility of water means that many watercourses cross national

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[26] Water is distributed unevenly in both time and space. Arid and semi-arid regions, where two-thirds of the world population receive only two per cent of the world's available freshwater and around twenty per cent of the available freshwater supply occurs where human demands are low, such as in the Amazon basin, Canada and Alaska. Of the remaining available freshwater, three quarters comes in the form of monsoons and floods. India, for example, receives most of its annual rainfall within a 100 hour period. *See* Revenga, *supra* note 24, at 40; Cosgrove, W.J., & Rijsberman, F.R., *World Water Vision – Making Water Everybody's Business* (Earthscan Publications Ltd. 2000), at 7.

[27] Between 1900 and 1995 global demand for water increased by over six times; this was largely due to population growth (*Comprehensive Assessment of the World's Freshwater, Report of the Secretary General*, U.N. Commission on Sustainable Development, 5th Sess., U.N. Doc. E/CN.17/1997/9 (1997), <http://www.un.org/esa/sustdev/sdissues/water/water_documents.htm>, (visited Jun. 13, 2003), para. 42).

[28] Around 2 million tons of waste per day are disposed of in surface water and groundwater (UNESCO, *supra* note 2, at 10).

[29] *See* Gleick, P.H., *The World's Water 2002-2003 – The Biennial Report on Freshwater Resources* (Island Press, New York 2002).

[30] Revenga, *supra* note 24, at 40.

[31] Ward, R.C. & Robinson, M., *Principles of Hydrology* (4th Ed., McGraw-Hill, London 2000), at 343.

boundaries, and can thus be described as "international watercourses."[32] International watercourses account for about half the world's freshwater and over 260 international watercourses are shared by 145 States.[33] Where water crosses national boundaries the use of an international watercourse in one State might have a significant social, economic or environmental impact in another State. Almost all States must therefore cooperate in order to reconcile competing interests over a large percentage of the world's watercourses. Such cooperation, and potential for conflict, is becoming increasing likely given the increased pressure being placed on the world's water resources. The indivisibility and number of international watercourses means that many States have no choice but to cooperate with each other in order to meet their water requirements.

Increased pressure on water, coupled with its importance in the social and economic development of a State provides a strong incentive for States to reconcile their competing interest over international watercourses. Conflicts or tensions over the uses of these international watercourses occur in many parts of the world.[34] For example, in the Middle East, Israel and Jordan's dispute over the Jordan River has resulted in Israel

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[32] A "watercourse" has been defined as "a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus" (Article 2(a) of the Convention on the Law of Non-Navigational Uses of International Watercourses, May 21, 1997 (not yet in force), *reprinted in* 36 I.L.M. 700 (1997)). Components of a watercourse include rivers, lakes, aquifers, glaciers, reservoirs and canals. The ILC notes that, "so long as these components are interrelated with one another, they form part of the watercourse" (Commentary to the *Draft Articles on the Law of the Non-navigational Uses of International Watercourses*, *Adopted on Second Reading,* in *Report of the International Law Commission on the work of its forty-sixth session*, *[*1994] 2(2) Y.B. Int'l L. Comm'n, at 222, at 90, <http://www.un.org/law/ilc/guide/gfra.htm>, (visited Oct. 20, 2003).

[33] UNESCO, s*upra* note 2, at 25. *See also* UNEP, *et al, Atlas of International Freshwater Agreements*, (UNEP, Nairobi 2002).

[34] *See generally* McCaffrey, S.C., "Water, Politics and International Law", *in* Gleick, P.H., *Water in Crisis: A Guide to the World's Fresh Water Resources*, 92 (Oxford University Press, New York 1993); Wolf, A.T., "Conflict and Cooperation over International Waterways", 1 Water Pol'y 251 (1998).

bombing a Jordanian dam project and occupying the headwaters in Syria and Lebanon.[35] Israelis and the Palestinians also dispute their respective rights and obligations over shared aquifers.[36] Turkey's major hydro-electric scheme on the Tigris-Euphrates has threatened to deprive Syria and Iraq of vital water supplies.[37] In 1989, Turkey threatened to restrict the flow of the Euphrates because of Syria's support of the Kurdish independence movement.[38] A planned US$ 120 billion project by India to divert one-third of the Brahmaputra river waters annually to its northern and southern regions, would allegedly have grave consequences for water shortages in Bangladesh.[39] In Europe, the Danube is the source of an ongoing dispute between Hungary and the Slovak Republic in connection to reconciling the economic interests of electricity generation and the satisfaction of essential environmental concerns.[40] In southern Africa, the Okavango has been a source of controversy between Namibia, Angola and Botswana.[41] Both Angola and Namibia have proposed water extractions and hydropower development that would threaten the survival of the Okavango Delta in Botswana, a unique habitat for thousands of mammals, birds, fish and other organisms, and an important source of economic income through tourism.

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[35] Anon, "Water in the Middle East: As thick as blood", The Economist, Dec. 23, 1995.
[36] Dempsey, J., ""Equitable" Division of Water a Vexed Issue: Israelis and Palestinians seek accord", Financial Times, Nov. 9, 1999.
[37] Anon, "Sharing Mesopotamia's Water: The Euphrates and Tigris Divided", The Economist, Nov. 13, 1999.
[38] *Id.*
[39] Anon, "Crisis Looms as India Plans Water Diversion," The Daily Star, Dhaka, Bangladesh, Apr. 7, 2003.
[40] Green Cross International, *Water for Peace,* <http://www.greencrossinternational.net/GreenCross Programs/waterres/waterresource.html>, (visited Jun. 18, 2003), at 32-41.
[41] *Id.* at 26-31.

The law of international watercourses through centuries of State practice has evolved into an effective system which provides a framework for the allocation of uses between States over international watercourses, and offers a mechanism for the avoidance and peaceful resolution of water disputes.[42] In so doing, the law of international watercourses establishes the substantive and procedural "rules of the game" on which States utilise international watercourses and thereby constitutes the foundations upon which international watercourses can be peacefully utilised.[43]

In short, the law of international watercourses therefore provides a useful "case study" because it is a tried and tested method by which States may reconcile their competing economic, social and environmental interests.

4. Purpose and Outline of the Thesis

The purpose of this thesis will be, firstly to critically assess past attempts to develop international law in the field of sustainable development, and secondly to offer a fresh approach based upon lessons learnt from the law of international watercourses.

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[42] Wouters, P.K., "The Relevance and Role of Water Law in the Sustainable Development of Freshwater – Replacing "Hydro-Sovereignty" and Vertical Proposals with "Hydro-Solidarity" and Horizontal Solutions," *in* Stockholm International Water Institute, *Proceedings of the a Joint Seminar Organised by the Stockholm International Water Institute and International Water Resources Association – Towards Upstream/ Downstream Hydrosolidarity*, 77 Stockholm, Sweden, Aug. 14, 1999, at 6. *See also* UNEP, *supra* note 33 at 12, which identifies more than 3600 international water treaties dating from ad 805 to 1984, and claims that international water treaties date as far back as 2500 bc when Lagash and Umma resolved a water dispute along the Tigris River through agreement.

[43] *Id.*

Structurally, the thesis is divided into four main sections. The first section develops a methodology, based on the sources of international law, by which to assess the normative content of what is claimed to be international law in the field of sustainable development. The second section utilises the analytical framework developed in section one in order to examine the relationship between the concept of sustainable development and international law. Section two initially considers the meaning of sustainable development, then examines how sustainable development has been reflected within the sources of international law, and finally analyses the various attempts to further develop international law in the field of sustainable development. The section concludes by arguing that there is a need for a fresh approach to the further development of international law in the field of sustainable development. By analysing the law of international watercourses, the third section seeks to identify lessons which can be learnt in order to develop a fresh approach to international law in the field of sustainable development. Section three will therefore focus on the key substantive and procedural "rules of the game" which provide a mechanism by which States reconcile their competing interests over international watercourses. The purpose of section four will be to draw upon the lessons learnt from the law of international watercourses in order to propose a fresh approach to international law in the field of sustainable development.

CHAPTER ONE

IDENTIFYING INTERNATIONAL LAW

1.1 The Normative Threshold

> "It is…true that the threshold does exist: on one side of the line, there is born a legal obligation that can be relied on before a court or arbitrator, the flouting of which constitutes an internationally unlawful act giving rise to international responsibility; on the other side, there is nothing of the kind."[1]

The international community has undergone considerable changes since World War II.[2] Amongst the most significant developments are the increased number of States, the greater diversity of interests between those States,[3] the growing interdependence of

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[1] Weil, P., "Towards Relative Normativity in International Law?", 77 Am. J. Int'l L. 413 (1983), at 417.

[2] The origin of modern international law can be traced back to the evolution of the modern State system in Western Europe in the seventeenth century and the classic writings of Grotious and others (Lauterpacht, H., "The Grotian tradition in International Law", 23 Brit. YB Int'l L. 1 (1946)). Modern international law was founded on the formalisation of international diplomacy and assuring the liberty of individual States (Friedmann, W., *The Changing Structure of International Law* (Stevens & Sons, London 1964), at 5). Friedmann notes that international diplomacy at the time, translated into rules of international law, was mainly concerned with,

> "… the adjustment of territorial sovereignties, the legal status of the high seas, the diplomatic and jurisdictional immunities of states, heads of governments and diplomatic representatives, the principles of recognition of states and governments; the protection of subjects of one sovereign in the territory of another; and the regulation of war and neutrality".

[3] The International Community is now more fully representative of developed and developing nations - more than 80 nations whose peoples were under colonial rule have joined the United Nations as sovereign independent states since the UN was founded in 1945 (*Basic Facts about the UN*, (UN Dept. of Public Information, New York 2003)).

States,[4] and a heightened awareness that many issues transcend national boundaries and require a global response.[5] These developments have put pressure on traditional international law-making processes, as States seek to find new mechanisms to adapt to global challenges and reconcile diverse State interests. One of the results has been a blurring of the line between what is international law and what is not.[6] However, as Weil notes, a distinction between what is law and what is not does still exist and consequences flow from such a designation.[7]

Finding the distinction between what is international law and what is not, is essential for this thesis and is therefore the primary purpose of this chapter. The chapter will firstly examine the nature of the international legal system and the consequences which flow from a breach of an international legal obligation. As a method for identifying rules and principles of international law, the chapter will then determine the sources of international law. Finally, based on a study of the international legal system and the law-

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[4] *See* Malanczuk, P., "Globalisation and the Future Role of Sovereign States", *in* Weiss, F., *et al., International Economic Law with a Human Face* 45 (Kluwer Law International, London 1998).

[5] *See* Brown-Weiss, E., "The Rise and Fall of International Law?", 69 Fordham L. Rev. 345 (2000).

[6] Much of the debate over what is international law and what is not centres around the meaning and content of "soft law". In its original sense, "soft law" was used to refer to vague norms of international law (*see* McNair, A.D., *The Law of Nations* (Clarendon Press, Oxford, 1961)). Subsequently, non-binding instruments have been referred to as "soft law". *See generally* Baxter, R., "International Law in "Her Infinite Variety"", 29 Int'l & Comp. L.Q. 549 (1980); Bothe, M., Legal and Non-legal Rules - A Meaningful Distinction in International Relations?", 11 Neth. Y.B. Int'l L. 65 (1980); Chinkin, C.M., "The Challenge of Soft Law: Development and Change in International Law", 38 Int'l Comp. L.Q. 850 (1989); Dupuy, P.M., "Soft Law and the International Law of the Environment", 12 Michigan J. Int'l L. 420 (1991); Handl, G., *et al.,* "A Hard Look at Soft Law", 82 Am. Soc'y Int'l L. Proc. 371 (1988); Hillgenberg, G., "A Fresh Look at Soft Law", 10 Eur. J. Int'l L. 499 (1999); Nollkaemper, A., "The Distinction Between Non-Legal and Legal Norms in International Affairs: An Analysis with Reference to International Policy for the Protection of the North Sea from Hazardous Substances", 13 Int. J. Marine & Coastal L. 355 (1998); Seidl-Hohenveldren, I., "International Economic "Soft Law"", 163 Receil des Cours 169 (1979 II); Shelton, D., "Law, Non-Law and the Problem of "Soft Law"", *in* Shelton, D., ed., *Commitment and Compliance* 1 (Oxford University Press, Oxford 2000).

making process, the chapter will develop an analytical framework through which to identify the normative content of international law in the field of sustainable development.

1.2 International Law and How it Works

1.2.1 Purpose of international law?

International law governs relations primarily between States; "in order to regulate the relations between these co-existing independent communities or with a view to the achievement of common aims."[8] International law can be defined as a body of norms legally binding on the subjects of international law in their relations with each other. [9] There are three types of legal norms: those that dictate what subjects must do (prescriptive norms); those that dictate what subjects must not do (prohibitive norms); and those that dictate what subjects may do (permissive norms).[10] States are the primary subjects of international law, although non-State entities, such as individuals, corporations and international organisations, may also be subjects of international law.[11] Under the international legal system States are treated as equals and unlike municipal legal systems, there is no supranational institution with supreme authority for law-

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[7] Weil, s*upra* note 1.
[8] The Lotus Case (Fr. v. Turk), 1927 P.C.I.J. (ser. A) No. 10, (Sep. 17), at 18. While States are the primary holders of international personality, international organisations and individuals may be subject to international law (Wallace, R.M.M., *International Law* (2nd Ed., Sweet & Maxwell, London 1992), at 58-88.
[9] *See* Jennings, R. & Watts, A., *Oppenheim's International Law* (9th Ed., Longman, Harlow 1992), at 4.
[10] Weil, s*upra* note 1, at 413. *See also* Kelsen, H., *General Theory of Norms* (Oxford University Press, Oxford, 1991), at 1-8; and Chayes, A. & Chayes, A.H., *The New Sovereignty: Compliance with International Regulatory Agreements* (First Harvard University Press, New York 1998), at 116.
[11] Bernhardt, R., ed., *Encyclopedia of Public International Law* (North-Holland, Amsterdam 1992), at 1160.

making, interpretation or enforcement at the international level.[12] In the absence of a supreme authority, responsibility for law-making, interpretation and enforcement rests with States. International law can also be described as a "universal system" because the fundamental rules of the legal system are applicable to all States.[13]

1.2.2 Consequences of a breach of an international legal obligation

Within the international community law is not the only means of regulating State conduct. Factors such as morality, courtesy and social custom also influence State conduct.[14] Why therefore resort to international law? States make use of international law because "law most precisely communicates expectations and produces reliance, despite inevitable ambiguities and gaps."[15] The reason why law most precisely communicates expectations and produces reliance is largely due to the nature of legal norms, that is, the ability to confer rights and obligations, and the consequences resulting from a breach of those norms, i.e., State responsibility.

Failure to comply with a rule of international law gives rise to international responsibility. Article 1 of the Draft Articles on State Responsibility stipulates that, "every internationally wrongful act of a State entails the international responsibility of

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[12] Malanczuk, P., *Akehurst's Modern Introduction to International Law* (7th Ed., Routledge, London 1997), at 3.
[13] Bernhardt, *supra* note 12, at 1163.
[14] Shelton, *supra* note 6, at 8.
[15] *Id.*

that State."[16] An "internationally wrongful act of a State" will arise when an act or omission, attributable to a State under international law, breaches an international obligation of the State.[17] Following a breach of an international obligation, an injured State is entitled to demand cessation, non-repetition and reparation.[18] Moreover, when a State breaches its international obligations, the injured State may take individual or collective countermeasures to attempt to force the offending State to comply with its international obligations.[19] Countermeasures may include suspending economic aid and cancelling supply agreements or diplomatic relations.[20] Where an injured State has

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[16] *Draft Articles on the Responsibilty of States for Internationally Wrongful Acts*, *in Report of the International Law Commission on the Work of its Fifty-third Session,* U.N. GAOR, Supp. (No. 10), U.N. Doc. A/56/10, *reprinted at* <http://www.un.org/law/ilc/texts/State_responsibility/responsibilityfra.htm>, (visited Jun. 13, 2003).

[17] *Id.* Article 2 stipulates that:

> "There is an internationally wrongful act of a State when conduct consisting of an action or omission:
> (a) is attributable to the State under international law; and
> (b) constitutes a breach of an international obligation of the State."

[18] Draft Articles on States Responsibility, s*upra* note 16. With regard to cessation and non-repetition, Article 30 reads:

> "The States responsible for the internally wrongful act is under an obligation:
> (a) to cease that act, if it is continuing;
> (b) to offer appropriate assurances and guarantees of non-repetition, if circumstances so require."

Reparation is covered by Article 34, which provides that: "Full reparation for the injury caused by the internationally wrongful act shall take the form of restitution, compensation and satisfaction."

[19] Draft Articles on States Responsibility *supra* note 16, Article 49 reads:

> "(1) An injured State may only take countermeasures against a State which is responsible for an internationally wrongful act in order to induce that State to comply with its obligations under Part Two.
> (2) Countermeasures are limited to the non-performance for the time being of international obligations of the State taking the measures towards the responsible State.
> (3) Countermeasures shall, as far as possible, be taken in such a way as to permit the resumption of performance of the obligations in question."

[20] Malanczuk, *supra* note 12, at 4.

suffered an armed attack, the right of self-defence will be available as an exception to the obligation to refrain from the threat or use of force.[21] If a breach of an international obligation by a State causes "a threat to the peace, breach of the peace, or act of aggression", States may take collective action through the UN Security Council.[22] The Security Council is entitled to adopt both military and non-military measures necessary to maintain or restore international peace and security. [23] The UN Charter also provides that parties shall seek to settle any dispute through peaceful means, including negotiation, enquiry, mediation, conciliation, arbitration or judicial settlement.[24] The International Court of Justice (ICJ) acts as the principal judicial organ of the UN for the peaceful settlement of disputes. While States are not obliged to take their disputes to the ICJ, any decision rendered by the Court will be binding on the States parties therein, and

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[21] Article 2(4) of the UN Charter, stipulates that: "All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations" (U.N. Charter, Jun. 29, 1945, (entered into force Oct. 24, 1945), 1 U.N.T.S. xvi). Article 51 of the UN Charter states that: "nothing in the present Charter shall impair the inherent right of individual or collective self-defence if attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security."

[22] *Id.* Article 39.

[23] UN Charter, s*upra* note 21, Article 41:

> "The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations."

Article 42 of the UN Charter reads:

> "Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations."

[24] UN Charter, s*upra* note 21, Article 33.

enforceable through Security Council measures.[25] There are therefore a range of consequences which arise only when a State breaches an international legal obligation.

The fact that an international legal system exists and that there are consequences attached to breaching a legal obligation provides a strong incentive for States to comply with their international legal obligations. As Henkin notes, "amost all nations observe almost all principles of international law and almost all of their obligations almost all of the time."[26] Franck maintains that States observe international law out of a perception of legitimacy,[27] "that quality of a rule which derives from a perception on the part of those to whom it is addressed that it has come into being in accordance with right process."[28] By adopting this approach international law can be defined as "law", not because of the presence of a sanction, but because of the quality of the norm itself and the law-making process. The law-making process is therefore pivotal to the effectiveness of the international legal system.

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[25] UN Charter, s*upra* note 21, Article 94.
[26] Henkin, L., *How Nations Behave – Law and Foreign Policy* (2nd Ed., Columbia University Press 1979), at 47.
[27] Franck, T.M., "Legitimacy in the International System", 82 Am. J. Int'l L. 705 (1988).
[28] *Id.* at 706. Franck identifies four indicators of rule legitimacy: determinacy, symbolic validation, coherence and adherence, *see id., at* 49. D'Amato notes that, Law is observed almost all of the time, not due to the threat of sanction but due to a perception that the law is "right, just, or appropriate" (D'Amato, A., *International Law: Process and Prospects* (Transnational Publishers Inc., New York 1995), at 3).

1.3 Identifying Rules and Principles of International Law

1.3.1 Article 38(1) of the Statute of the ICJ

Rules and principles[29] of international law derive their authority from their source. A study of the "sources" of international law is therefore necessary. This section will consequently be dedicated to determining what are the sources of international law, and how can they be identified. The sources of international law are stated by the ICJ to be:

> "a. international conventions, whether general or particular, establishing rules expressly recognised by the contracting states;
> b. international custom, as evidence of general practice accepted as law;
> c. the general principles of law recognised by civilised nations;
> d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law."[30]

Conventions, international custom and general principles of law are considered to be "primary" sources of international law. Judicial decisions and teachings of the most highly qualified publicists are "secondary" sources because rather than creating law, they point to where the law may be found.[31] All the sources of international law will be

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[29] The Chamber of the ICJ in the *Gulf of Maine* case noted that "the use of the term 'principle' may be justified because of their more general and more fundamental character" (Case Concerning the Delimitation of the Maritime Boundary in the Gulf of Maine Area (Can. v. U.S.), 1984 I.C.J. 246 (Oct. 12)).
[30] Article 38 of the Statute of the International Court of Justice, Annexed to the U.N. Charter, *supra* note 21. Article 38 is widely accepted as representative of the sources of international law (*See* Danilenko, G.M., *Law-making in the International Community* (Martinus Nijhoff Publishers, Dordrecht 1993), at 29).
[31] Wallace, *supra* note 8.

discussed in detail below, due to their fundamental importance to ascertaining rules and principles of international law.

1.3.2 International Conventions

International conventions or treaties provide the most concrete evidence of the existence of rights and obligations between States. Once in force the provisions of a treaty bind the parties to it and these provisions must be carried out in good faith.[32] The reverse is also true: a treaty will only be binding on the States that have consented to be bound by its terms.[33] While Article 38(a) of the Statute of the ICJ mentions only international conventions, the provision clearly covers any written form establishing rules and principles expressly recognised by the contracting States. International conventions are defined under Article 2(a) of the 1969 Vienna Convention on the Law of Treaties as being, "an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation."[34]

Various types of treaties exist. Bilateral treaties are concluded between two States, while multilateral treaties are between more than two States. Treaties are also described as "universal", "regional", "contractual" or "law-making". Contractual treaties create

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[32] Art 26 of the Convention on the Law of Treaties, May 23, 1969 (entered into force Jan. 27, 1980), *reprinted in* 8 I.L.M. 679 (1969), "Every treaty in force is binding upon the parties to it and must be performed by them in good faith."
[33] *Id.*, Article 34: "A treaty does not create either obligations or rights for a third state without its consent."
[34] Vienna Convention on Law of Treaties, *supra* note 32.

particular law between the signatories, much like a contract in domestic legal systems.[35] Law-making treaties lay down rules of general character capable of general application.[36] Universal law-making treaties have played an important role in promoting cooperation between States over common concerns such as human rights[37] and environmental protection.[38] Law-making treaties may also influence the development of international custom and will therefore be discussed further in the section on international custom.

An essential element of any treaty is its ability to create obligations under international law.[39] If no such intention exists then there is no binding international obligation. This element excludes a large body of instruments relating to development and the environment from being classified as treaties. All UN General Assembly Resolutions, such as the 1974 Charter of Economic Rights and Duties of States,[40] are excluded because the State parties only intend to adopt recommendations in the General Assembly.[41] A large number of instruments adopted at international conferences and

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[35] Wallace, *supra* note 9, at 19; Zemenek, K., "The Legal Foundations of the International System", 266 Recueil des Cours 9 (1997), at para. 326 - 327.
[36] Jennings, *supra* note 9, at 32.
[37] International Covenant on Civil and Political Rights, Dec. 19, 1966, *reprinted in* 6 I.L.M. 368 (1967) (entered into force Mar. 23, 1976); International Covenant on Economic, Social and Cultural Rights, Dec. 19, 1966, *reprinted in* 6 I.L.M. 360 (entered into force Jan. 3, 1976).
[38] UN Convention on the Law of the Sea, Dec. 10, 1982, (entered into force Nov. 16, 1994), *reprinted in* 21 I.L.M. 1261 (1982); UN Framework Convention on Climate Change, May 9, 1992, (entered into force Mar. 24, 1994), *reprinted in* 31 I.L.M. 849 (1992) Convention on Biological Diversity, Jun. 5, 1992, (entered into force Dec. 29, 1992), *reprinted in* 31 I.L.M. 822 (1992).
[39] Aust, A., *Modern Treaty Law and Practice* (Cambridge University Press, Cambridge 2000), at 17.
[40] *Charter of Economic Rights and Duties of States,* GA Res. 3281 (XXIX), U.N. GAOR, 29th Sess., Supp. (No. 31), UN Doc. A/Res/3281(XXIX) (1975), *reprinted in* 14 I.L.M. 251 (1975).
[41] Article 13(1) of the UN Charter, *supra* note 21, reads:

> "The General Assembly shall initiate studies and make recommendations for the purpose of:
> a. promoting international co-operation in the political field and encouraging the progressive development of international law and its codification;

meetings in order to augment State consensus on a particular issue are also excluded from the category of treaty because States do not have the intention to create obligations under international law. Examples of the latter type of instrument include the 1972 Stockholm Declaration and Action Plan for the Human Environment,[42] the 1992 Rio Declaration on Environment and Development and Agenda 21[43] and the 2003 Ministerial Declaration of the 3rd World Water Forum.[44] However, while these "non-binding" instruments are not a source of treaty law they may be relevant to the formation of international custom, and will therefore be discussed in the next section.

1.3.3 International Custom

In a legal system where there is no legislature, custom plays an important role in regulating conduct between States. Article 38(b) of the Statute of the ICJ is slightly misleading in its definition of international custom, "as evidence of general practice accepted as law", for it is general practice accepted as law which provides evidence of international custom.[45] For a rule or principle of customary international law to exist, in

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b. promoting international co-operation in the economic, social, cultural, educational, and health fields, an assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion."

[42] Declaration of the UN Conference on the Human Environment, Jun. 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1416 (1972); Action Plan on the Human Environment, Jun. 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1421 (1972).

[43] Declaration of the UN Conference on Environment and Development, Rio de Janeiro, Brazil, Jun. 13, 1992, in Report of the United Nations Conference on Environment and Development, Annex I, U.N. Doc. A/Conf.151/26 (Vol. I), reprinted in 31 I.L.M. 876 (1992); *Agenda 21: A Programme for Action for Sustainable Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development,* Annex II, U.N. Doc. A/Conf.151/26 (Vol. II) (1992).

[44] *Ministerial Declaration of the 3rd World Water Forum*, Kyoto, Japan, Mar. 23, 2003, *available at* <http://www.world.water-forum3.com/jp/mc/md_final.pdf >, (visited Jun. 13, 2003).

[45] Higgins, R., *Problems and Process – International Law and How We Use It* (Clarendon Press, Oxford, 1994), at 18; Danilenko, *supra* note 30, at 76. Cf. Jennings *supra* note 9, at 26: "...the formulation in the

general it is agreed that there must be two essential elements: a State practice and *opinio juris*.[46]

1.3.3.1 State Practice

For State practice to exist certain conditions must be met. In the *Asylum case*, the ICJ referred to the need for the practice to be "constant and uniform"[47], while in the *North Sea Continental Shelf Cases*, the ICJ spoke of "a settled practice."[48] What constitutes "a settled" or "constant and uniform" practice will depend on the particular facts and circumstances of each case, although certain guidelines can be found in past decisions of tribunals. In the *North Sea Continental Shelf Cases* the ICJ cautiously accepted that duration was not a primary concern as long as it could be proven that the practice was "extensive and virtually uniform."[49] The ICJ therefore decided that "a short period of time is not necessarily, or of itself, a bar to the formation of a new rule of customary international law."[50] Modern means of communication and the evolution of new forms of state practice within international organisations and conferences may have decreased the time necessary for international custom to form.[51]

Statute [of the ICJ] serves to emphasise that the substance of this source of international law is to be found in the practice of states." Jennings goes on to write,

> "…since the practice in question is followed by states because it is believed by them to be already legally obligatory, the source of the obligation must precede the custom to which the practice gives rise: in this sense the custom may correctly be regarded as *evidence* of the practice accepted as law, not its source."

[46] North Sea Continental Shelf Cases (FRG/Dem.; FRG/ Neth.), 1969 ICJ 3 (Feb. 20), at para. 77.
[47] The Asylum Case (Colum. v. Peru), 1950 I.C.J. 266 (Nov. 20).
[48] North Sea Continental Shelf Cases, *supra* note 46.
[49] *Id.* at para. 74.
[50] *Id.*
[51] Danilenko, *supra* note 30, at 97-98.

The decision in the *North Sea Continental Shelf Cases* is informative since it calls for "virtually uniform" practice as opposed to the stricter requirement in the *Asylum Case* for "uniform" practice.[52] In the *Fisheries Case*, the ICJ noted that "too much importance need not be attached to the few uncertainties or contradictions, real or apparent…."[53] Similarly, in the *Nicaragua Case*, the ICJ stated that the practice did not have to be in "absolute rigorous conformity with the rule," but rather "the conduct of States should, in general, be consistent with such rules and that instances of State conduct inconsistent with a given rule should generally have been treated as breaches of that rule, not as indications of the recognition of a new rule."[54] Some inconsistencies in practice may therefore be tolerated in the formation of customary international law.

For a universal rule or principle of customary international law to exist it is imperative that the number of States involved in the practice is both widespread and representative, but not necessarily universal.[55] However, an exception to this condition will be

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[52] In the Asylum case, *supra* note 47, the ICJ declared that:

> "…the facts brought to the knowledge of the Court disclose so much uncertainty and contradiction, so much fluctuation and discrepancy in the exercise of diplomatic asylum and in the official views expressed on various occasions, there has been so much inconsistency in the rapid succession of conventions on asylum, ratified by some states and rejected by others, and the practice has been so much influenced by considerations of political expediency in the various cases, that it is not possible to discern in all this any constant and uniform usage, accepted as law, with regard to the alleged rule of unilateral and definitive qualification of the offence."

[53] Fisheries Case (UK v. Nor.), 1951 I.C.J. 116 (Dec. 18), para 138.
[54] Military and Paramilitary Activities In and Against Nicaragua (Nicar. v. US), 1986 I.C.J. 14 (Jun. 27).
[55] North Sea Continental Shelf Cases, *supra* note 46, at para. 73

applicable in specialised fields such as the law of the sea, where the practice of States "specially affected" appears to suffice. [56]

Both the acts and omissions of a State constitute State practice for the purposes of forming customary international law.[57] Although some writers would limit practice to only physical acts,[58] a more commonly held view in keeping with modern day society is that State practice is comprised of both what States say and what they do.[59] Evidence of such practice can be ascertained from a variety of materials sources, including:

> "…diplomatic correspondence, policy statements, press releases, the opinions of legal advisers, official manuals on legal questions, e.g., manuals of military law, executive decisions and practices, orders to naval forces, etc., comments by governments on drafts produced by the International Law Commission, state legislation, international and national judicial decisions, recitals in treaties and other international instruments, a pattern of treaties in the same form, the practice of international organs, and resolutions relating to legal questions in the United Nations General Assembly." [60]

The weight given to a particular source will depend on the extent to which it can be relied upon to be an authentic record of the practice of States.

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[56] *Id.*
[57] The Asylum Case, *supra* note 47; Akehurst, M., "Custom as a Source of International Law", 47 Brit. Y.B. Int'l Law 1 (1977), at 1-31; Bernhardt, *supra* note 12, at 900; Mendelson, M.H., "The Formation of Customary International Law", 272 Receuil des Cours 155 (1998), at 197-244.
[58] D'Amato, *supra* note 28, at 88.
[59] Akehurst, *supra* note 57, at 1.
[60] Brownlie, I., *Principles of Public International Law* (Clarendon Press, Oxford 1998), at 5.

1.3.3.2 Opinio Juris

The second element required for the formation of international custom is whether a practice is accepted as law, often simply called *opinio juris*. This element differentiates custom from usage. A *usage* is defined as, "a habit of doing certain actions which has grown up without there being the conviction that these actions are, according to international law, obligatory or right."[61] In the *North Sea Continental Shelf Cases* the ICJ stipulated that for the creation of international law, State practice must be supplemented by:

> "…evidence of a belief that…practice is rendered obligatory by the existence of a rule of law requiring it. The need for such a belief, i.e., the existence of a subjective element, is implicit in the very notion of the *opinio juris sive necessitatis*. The States concerned must therefore feel that they are conforming to what amounts to a legal obligation. The frequency, or even habitual character of the acts is not in itself enough. There are many international acts, e.g., in the field of ceremonial and protocol, which are performed almost invariably, but which are motivated only by consideration of courtesy, convenience or tradition, and not by any sense of legal duty."[62]

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[61] Jennings, *supra* note 9, at 27. A classic example of a usage as opposed to custom in international relations is the commonly held practice of using white paper for all diplomatic correspondence.

[62] North Sea Continental Shelf Cases, *supra* note 46, para. 77. *See also* The Lotus Case, *supra* note 8, at 28: "…only if such abstention were based on their being conscious of a duty to abstain would it be possible to speak of an international custom."

Proving the existence of *opinio juris* involves finding evidence that a State accepts or acquiesces to a practice being legally binding. Evidence of *opinio juris* can be found in the "official views expressed on different occasions."[63] In the *Nicaragua Case*, the ICJ accepted that State consent to certain General Assembly Resolutions, "may be understood as an acceptance of the validity of the rule or set of rules declared by the resolution by themselves."[64] If it is accepted that State practice includes not only physical acts of States, but also "other persuasive manifestations of state legal policy, including official statements,"[65] there is clearly a close link between State practice and *opinio juris* because in many cases the State practice itself may provide "evidence of a belief that … practice is rendered obligatory by the existence of a rule of law requiring it."[66] The material sources for seeking *opinio juris* will therefore overlap with material sources of State practice.

1.3.3.3 Relationship between Treaty and International Custom

A close relationship exists between treaties and international custom. While a treaty is only binding on the States that have consented to be bound by its terms, it may be a material source of international custom because it regulates patterns of conduct between States.[67] What is more, if a widespread and representative number of States agree to be

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[63] Asylum Case, *supra* note 47, at 277.
[64] Nicaragua Case, *supra* note 54, para. 188. In Nicaragua Case, the ICJ was willing to accept proof of *opinio juris* from State consent to UN General Assembly Resolution 2625(XXV) Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations.
[65] Danilenko, *supra* note 30, at 87.
[66] Case Concerning the Delimitation of the Maritime Boundary in the Gulf of Maine Area (Can. V. U.S.), 1984 I.C.J. 149 (Oct. 12), paras. 91-93; Brownlie, *supra* note 60, at 7.
[67] D'Amato, *supra* note 28, at 104.

bound by a treaty and apply the provisions of the treaty in their State practice, the rules originally found in the treaty may, sometimes in a short period of time, come to reflect international custom and thus indirectly bind the States not party to the treaty.[68] The same situation might occur where a large number of bilateral treaties regulating the similar conduct provide the same general rights and obligations.[69] The latter scenario is particularly relevant to the field of international watercourses, where a network of bilateral treaties has developed covering similar issues in different international watercourses.[70]

For a treaty provision to reflect a rule of international custom it must be of "a fundamentally normcreating character such as could be regarded as forming the basis of a general rule of law."[71] In certain circumstances provisions of a treaty may be so uncertain in meaning that they are incapable of conferring rights and obligations on the subjects of international law. As one writer puts it:

> "It is often not easy to understand exactly what these obligations bind the States to. In consequence it is still harder to establish when such obligations may have been breached by a State, which would then be guilty of an internationally wrongful act involving its

[68] North Sea Continental Shelf Cases, *supra* note 46, at para. 71.
[69] *See generally* Baxter, R., "Treaties and Custom", 129 Recueil des Cours 31 (1970), at 75-91.
[70] *See* UNEP, et al., *Atlas of International Freshwater Agreements* (UNEP, Kenya 2002).
[71] North Sea Continental Shelf Cases, *supra* note 46, para. 72.

> responsibility towards one or several other States (and again, which, in the case of multilateral treaties?)." [72]

Article 12 of the 1994 Desertification Convention is an example of a treaty provision where it is not easy to understand exactly what the obligation binds the contracting parties to. The Article provides that "affected parties, in collaboration with other Parties and the international community, should cooperate to ensure the promotion of an enabling international environment in the implementation of the Convention."[73] The use of the term "should" means that Parties are encouraged rather than obliged, to "promote" instead of implement, the vague notion of "an enabling international environment." If the application of a provision contained within a treaty is solely at the discretion of the parties to the Convention, then it is not of a fundamental norm creating character.[74]

Whether a State has discretion to apply a treaty provision or not can usually be determined by the ordinary meaning of the words used, or by reservations attached to a treaty. For example, Article 3 of the 1992 Climate Change Convention notes that "the Parties shall be guided" by certain principles.[75] States therefore have discretion to decide whether to follow a principle or not. In addition, the provision goes on to urge that the Parties, "should take precautionary measures to anticipate, prevent or minimise the

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[72] Comment by Condorelli *in* Cassese, A. & Weiler, J.H.H., eds., *Change and Stability in International Law-Making* (Walter de Gruyter, Berlin 1988), at 78.
[73] Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Oct. 14, 1994, (entered into force Oct. 14, 1994), 1954 U.N.T.S. 3.
[74] *See* Schachter, O., *International Law in Theory and Practice* (Martinus Nijhoff Publishers, Dordrecht 1991), at 98.
[75] Climate Change Covnention, *supra* note 38.

causes of climate change and mitigate its adverse effects."[76] The use of a word such as "should" rather than "must" means that the latter provision lacks norm creating character. Similar terms that preclude States being legally bound by the terms of a provision include, "shall endeavour"[77] and "taking into account."[78]

While treaties *per se* can influence international custom, the multilateral treaty making process can also have a significant sway. Over 500 multilateral "norm-creating" treaties have been initiated, negotiated and adopted within the UN system, or by international conferences under the auspices of the UN.[79] The treaty making process may declare, crystallise or develop rules of international custom.[80] Crystallising norms are those that, prior to the formulation of the treaty provision enjoyed a level of consensus falling short of that needed to be a norm of customary international law.[81] Nevertheless, as a result of the treaty making process the norm becomes part of customary international law. Norm-

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[76] Climate Change Convention, *supra* note 38.
[77] Article 3(2) of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Jun. 25, 1998 (entered into force Oct. 30, 2001), *reprinted in* 38 I.L.M. 517 (1999): "Each Party shall endeavour to ensure that officials and authorities assist and provide guidance to the public in seeking access to information, in facilitating participation in decision-making and in seeking access to justice in environmental matters."
[78] *See* Article 10(1) of the Montreal Protocol on Substances that Deplete the Ozone Layer, Sep. 16, 1987, (entered into force Jan. 1, 1989), 1522 U.N.T.S. 3: "The Parties shall, in the context of the provisions of Article 4 of the Convention, and taking into account in particular the needs of developing countries, co-operate in promoting technical assistance to facilitate participation in and implementation of this Protocol."
[79] *See* Status of Multilateral Treaties deposited with the Secretary-General, <http://untreaty.un.org>, (visited Jun. 18, 2003); Schachter, O., "United Nations Law", 88 Am. J. Int'l L. 2 (1994).
[80] Baxter, *supra* note 69.
[81] Degan, V.D., *Sources of International Law* (Martinus Nijhoff Publishers, Dordrecht 1997), at 207-211.

developing provisions are new at the time of formulating a treaty, but become part of customary international law through subsequent State practice and *opinio juris*.[82]

At various stages within the treaty making process States have the opportunity to give their opinion as to what they perceive international law is (*lex lata*) and what they feel international law should be (*lex ferenda*). However, caution must be employed in order to ascertain the true beliefs of States. A claim by a State as to the status of a particular rule may represent a negotiating position rather than provide a true reflection of State opinion.[83] What is more, State consensus on the inclusion of a particular provision within a treaty may be based more on political trade-offs than acceptance of the provision as representing international custom.[84]

State participation in the treaty making process can be illustrated by looking at how the 1997 UN Watercourses Convention was initiated, negotiated and adopted.[85] The treaty making process was started by States in 1959 when the General Assembly decided to "initiate preliminary studies on the legal problems relating to the utilisation and use of international rivers with a view to determining whether the subject is appropriate for

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[82] An example of such a provision may be seen by the development of the concept of the EEZ to be found in Articles 55-70 of UNCLOS, which was discussed by the ICJ in Case Concerning the Continental Shelf (Libya v. Malta), 1985 I.C.J. 13 (Jun. 3), at 33

[83] *Id.* at 150.

[84] Charney, J.I., "International Agreements and the Development of Customary International Law", 61 Wash. L. Rev. 971 (1986), at 977.

[85] For a more extensive study of the initiation, adoption and negotiation process of the 1997 UN Watercourses Convention, *see* Wouters, P.K., "The Legal Response to International Water Conflicts: The UN Watercourses Convention and Beyond", 42 German YB Int'l L. 293 (1999), at 304-319; Tanzi, A. & Arcari, M., *The United Nations Convention on the Law of International Watercourses – A Framework for Sharing* (Kluwer Law International, London 2001), at 35-45.

codification."[86] Following a Report of the UN Secretary-General,[87] States decided at the 25th Session of the General Assembly in 1970, that the International Law Commission (ILC) should undertake a study of the law of non-navigational uses of international watercourses with a view to its progressive development and codification.[88] At the start of the ILC's work and at various other stages, States were invited to give their opinion as to the status of the law of international watercourses.[89] In 1991, the ILC completed a set of draft articles and adopted these on first reading.[90] At this stage, States were given the opportunity to comment on the draft and comments were received from 21 governments.[91] The ILC draft was then modified and adopted by the ILC on Second Reading in 1994, with the recommendation that a convention be concluded based on the ILC's Draft Articles, or by an international conference of States.[92] The General Assembly subsequently decided to convene the Sixth Committee (Legal), as a Working Group of the Whole, with the remit of adopting a multilateral treaty on the law of the non-navigational uses of international watercourses based on the ILC's 1994 Draft

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[86] UN GA Res. 1401(XIV).
[87] Report of the Secretary-General on the Legal Problems Relating to the Utilisation of International Rivers, UN Doc. A/5409 (1963).
[88] *Progressive Development and Codification of the Rules of International Law Relating to International Watercourses*, G.A. Res. 2669(XXV), UN GAOR, 25th Sess., U.N. Doc. A/RES/2669(XXV) (1970), *reprinted in* 9 I.L.M. 1292 (1970).
[89] A questionnaire (UN Doc. A/CN.4/294 and Add 1) adopted at the beginning of the ILC's work elicited general comments and observations and replies to specific questions relating to a study of the law of international watercourses.
[90] Draft Articles on the Law of Non-navigational Uses of International Watercourses, Report of the ILC on the Work of its Forty-third Session, U.N. GAOR, 46th Sess., Supp. (No. 10), UN Doc. A/46/10 (1991), reprinted in [1991] 2(2) Y.B. Int'l L. Comm'n 1, at 66, 66-70.
[91] Comments and Observations Received from States, UN Doc. A/CN.4/447 (1993) and Add 1, 2 and 3.
[92] *Draft Articles on the Law of the Non-navigational Uses of International Watercourses*, *in Report of the International Law Commission on the work of its forty-sixth session*, UN GAOR, 49th Sess., Supp. (No. 10), U.N. Doc. A/49/10 (1994), *reprinted in* [1994] 2(2) Y.B. Int'l L. Comm'n, at 222.

Articles.[93] The Working Group met in two sessions, in 1996 and 1997, and generated considerable debate between States on various aspects of the law of international watercourses.[94] Finally, the text of the Convention on the Law of the Non-navigational Uses of International Watercourses was adopted by the General Assembly, 21 May 1997.[95]

The process of adopting the UN Watercourses Convention illustrates the potential for ascertaining State practice and *opinio juris* at various stages during the treaty making process, as States are requested to comment on the existing law, the need for reform, the ILC Draft Articles, and the drafting of a final text. The work of the ILC in itself can also provide an authoritative account of existing and emerging rules or principles of international law in a particular field.

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[93] GA Res. 49/52, UN doc. A/Res/49/52. The annex to GA Res. 49/52, "Methods of work and procedure", reads:

> "…the draft Articles prepared by the ILC shall be the basic proposal before the Working Group; the Working Group shall start at once a discussion of the Draft Article on an article-by-article basis, without prejudice of simultaneously considering closely connected articles, the decision on article 2 relating to the "use of terms" being reserved for the concluding stages of the work; the Working Group shall establish a Drafting Committee; once consider by the Working Group of the whole, each article or group of articles shall be referred to the Drafting Committee for examination in the light of the discussion; the Drafting Committee shall make recommendations to the Working Group in relation to each article or group of articles and shall prepare and present to the Working Group for its approval a draft preamble and a set of final clauses; the Working Group shall endeavour to adopt all text by general agreement and failing such an agreement it will take its decisions in accordance with the rules of procedure of the General Assembly."

[94] *See* Wouters, *supra* note 85, at 305-313.

[95] Convention on the Law of Non-Navigational Uses of International Watercourses, May 21, 1997 (not yet in force), *reprinted in* 36 I.L.M. 700 (1997).

The importance of this process can be partly shown by the influence the 1997 UN Watercourses Convention has had on the application and development of international law despite that fact that it has yet to enter into force.[96] States have relied on the 1997 UN Watercourses Convention to develop international watercourse agreements,[97] and the ICJ in 1997 considered certain provisions of the Convention reflective of international custom.[98]

1.3.3.4 Relationship between Non-binding Instruments and International Custom

It was noted above that States have increasingly resorted to the use of "non-binding" instruments in order to reconcile diverse interests over matters of common concern.

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[96] As of May 6, 2003, twenty States have signed and/or ratified the 1997 UN Watercourses Convention: Côte d'Ivoire, Finland, Germany, Hungary, Iraq, Jordan, Lebanon, Luxembourg, Namibia, Netherlands, Norway, Paraguay, Portugal, Qatar, South Africa, Sweden, Syrian Arab Republic, Tunisia, Venezuela, Yemen (Status of Multilateral Treaties deposited with the Secretary-General, *supra* note 78). Article 36 of the 1997 UN Watercourses Convention provides that: "The present Convention shall enter into force on the ninetieth day following the date of deposit of the thirty-fifth instrument of ratification, acceptance, approval or accession with the Secretary-General of the United Nations."

[97] The preamble of the Tripartite Interim Agreement Between Mozambique, South Africa and Swaziland for Cooperation on the Protection and Sustainable Utilisation of the Water Resources of the Incomati and Maputo Watercourses, Aug. 29, 2002 (not yet in force), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html> (visited Jun. 13, 2003), reads: "Taking into account the modern principles and norms of International Law as reflected in the Convention on the Law of the Non-Navigational Uses of International Watercourses adopted by the General Assembly of the United Nations on 21 May 1997."

[98] Case Concerning the Gabčíkovo-Nagymaros Project (Hung./ Slovak.), Sep. 25, 1997, 37 I.L.M. 162 (1998). In paragraph 147 of its decision, for example, the ICJ states:

> "Re-establishment of the joint regime will also reflect in an optimal way the concept of common utilization of shared water resources for the achievement of the several objectives mentioned in the Treaty, in concordance with Article 5, paragraph 2, of the Convention on the Law of the Non-Navigational Uses of International Watercourses, according to which:
>
> > "Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention." (General Assembly Doc. A/51/869 of 11 April 1997.)"

Assessing the legal relevance of these "non-binding" instruments has proven particularly problematic, especially when such instruments are endorsed by all or most States, and are statements of *lex lata* or *lex ferenda*. UN General Assembly Resolutions are an example of such instruments, and there is considerable debate as to their relevance to international law. [99]

Under the UN Charter, UN General Assembly Resolutions are only intended to be recommendations and are therefore not binding on States. Yet what happens when a UN General Assembly Resolution declares *lex lata* or *lex ferenda* and has unanimous, or almost unanimous, State support?[100] Is unanimous, or near unanimous support, in an international forum sufficient to prove the existence of a rule of international law? In some cases the title of a UN General Assembly Resolution may point more towards it being a declaration of the law rather than a recommendation.[101] On the face of it recognising such UN GA Resolutions as a source of international law is persuasive. States are the primary subjects of international and States create international law. So, if

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[99] *See generally* Cheng, B., "Custom: The Future of General State Practice in a Divided World", *in* McDonald, R. & Douglas, M.J., eds., *The Structure and Process of International Law: Essays in Legal Philosophy Doctrine and Theory* (Martinus Nijhoff Publishers, Dordrecht 1983); Chodosh, H., "Neither Treaty nor Custom: the Emergence of Declarative International Law", 26 Tex. Int'l L.J. 87 (1991); D'Amato, A.A., "Trashing Customary International Law", 81 Am. J. Int'l L. 101 (1987); Arangio-Ruiz, G., "The Normative Role of General Assembly UN Declaration and the Development of Principles of Friendly Relations", 137 Recueil des Cours 1 (1972 III); Schachter, *supra* note 73, at 84 – 94; Schwebel, S.M., "The Effect of Resolutions of the UN General Assembly on Customary International Law", Proc. Am. Soc. Int'l L. 301 (1979); Falk, R.A., "On the Quasi-Legislative Competence of the General Assembly", 60 Am. J. Int'l L. 782 (1966); Feuer, G., "The Role of Resolutions in the Creation of Generational Rules in the International Law of Development", *in* Snyder, F. & Slinn, P., eds., *International Law of Development: Comparative Perspectives* 87 (Professional Books Ltd., Abingdon 1987).

[100] See for example, *Declaration on the Principles of International Law Concerning Friendly Relations and Cooperation among States in Accordance with the Charter of the United Nations*, G.A. Res. 2625(XXV), U.N. GAOR, 25th Sess., 1883rd Plen. mtg., Supp. (No. 28), Annex, U.N. Doc. A/Res/2625(XXV) (1970), *reprinted in* 9 I.L.M. 1292 (1970).

States have clearly stated what they perceive law to be in an international forum, surely that would suffice as a confirmation of the law? Is this any different from all or most States agreeing to be bound by an international treaty, or all or most States complying with a rule of international custom? The answer is yes, it is different. There is no getting away from the fact that UN General Assembly Resolutions and other non-binding instruments are not intended to be a primary source of international law, and more importantly, States are fully aware of that fact. As Professor Arangio-Riuz puts it, States simply "don't mean it".[102]

While caution should therefore be applied when considering the importance of non-binding instruments, they may still provide important evidence of the existence, or non-existence, of international custom. In its *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons* the ICJ pointed out that:

> "…General Assembly resolutions, even if they are not binding, may sometimes have

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[101] *Id.*

[102] Arangio-Ruiz, *supra* note 99, at 457. On the intention of States to UN General Assembly Resolutions, Schwebel, *supra* note 99, at 303, writes:

> "Those who deny that the General Assembly enacts or alters international law point out that, in fact, States Members of the United Nations often vote for much with which they actually disagree. They often go along with a consensus when their reservations are not secondary but primary. They often vote casually: their delegates may be instructed or loosely instructed; they may vote because the members of their group have decided or are disposed so to vote rather than because the immediate interests or considered views of their government so suggest. The members of the General Assembly typically vote in response to political not legal considerations. They do not conceive of themselves as creating or changing international law. It normally is not their intention to affect international law but to make the point which the resolution makes. The issue often is one of image rather than international law: states will vote a given way repeatedly not because they consider that their reiterated votes are evidence of a practice accepted as law but because it is politically unpopular to vote otherwise."

> normative value. They can, in certain circumstances, provide evidence important for establishing the existence of a rule or the emergence of an opinio juris. To establish whether this is true of a given General Assembly resolution, it is necessary to look at its content and the conditions of its adoption; it is also necessary to see whether an opinio juris exists as to its normative character. Or a series of resolutions may show the gradual evolution of the opinio juris required for the establishment of a new rule." [103]

UN General Assembly Resolutions, and other non-binding instruments, may also be an important stepping stone on the way towards adopting a treaty. For example, the 1963 Declaration of Legal Principles governing the Activities of States in the Exploration and Use of Outer Space[104] formed the basis of the 1967 Outer Space Treaty.[105]

Non-binding instruments can further influence the development of international custom when the instruments, or provisions within that instrument, are subsequently included in binding agreements. Whether such non-binding instruments are concluded by States or private institutions is immaterial, as long as they are considered by States to be a reflection of *lex lata* or *lex ferenda.* An example can be seen by the International Law

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[103] Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226 (Jul. 8), para. 70.
[104] *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*, G.A. Res. 1962(XVIII), U.N. GAOR, 18th Sess., 1280th Plen. mtg., U.N. Doc. A/RES/1962(XVIII) (1963).
[105] Treaty on Principles Governing the Activities of States in Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967(entered into force Oct. 10, 1967), 610 U.N.T.S. 205 (1967).

Association's (ILA) Helsinki Rules on International Rivers[106] which have subsequently been reflected in numerous international watercourse agreements.[107]

1.3.4. General Principles of Law

The President of the Statute of the ICJ drafting committee, Baron Descamps, originally proposed the inclusion within the sources of international law, "the rules of international law as recognised by the legal conscience of civilised nations."[108] The intention of the provision was to endeavour to introduce principles of "objective justice" or natural law principles.[109] This proposal met with serious opposition from other members of the committee who questioned whether it was appropriate to give the ICJ such wide discretion to determine "the conscience of civilised nations."[110] The final version of Article 38(1)(c), "general principles of law recognised by civilised nations", was a

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[106] *Helsinki Rules on the Uses of the Waters of International Rivers,* adopted by the ILA at the 52nd Conference, Helsinki, Finland, Aug. 1966*, reprinted in* Bogdanović, S., *International Law of Water Resources – Contribution of the International Law Association (1954-2000)*, 89 (Kluwer Law International, The Hague 2001).

[107] *See for example,* the Agreement between the Governments of Angola, the Republic of Botswana and the Republic of Namibia on the establishment of a Permanent Okavango River Basin Water Commission (OKACOM), Sep. 15, 1994 (entered into force Sep. 15, 2003), <http://www.fao.org/docrep/W7414B/w7414b0m.htm>, (visited Jun. 13, 2003), "bearing in mind the Helsinki Rules on the use of the waters of international rivers as approved at the 52nd Conference on the International Law Association in 1966"; the Treaty on the Development and Utilisation of the Water Resources of the Komati River Basin between Swaziland and South Africa, Mar. 13, 1992, *reprinted at* <http://www.kobwa.co.za/kobwa_treaty_menu.cfm>, (visited Jun. 3, 2003), "… wishing to further promote the tradition of good neighbourliness and peaceful co-operation between them on the basis of the rules relating to the uses of the waters of international rivers, approved in 1966 at Helsinki by the 52nd Conference of the International Law Association"; and Agreement between Namibia and South Africa on the Establishment of a Permanent Water Commission, Sep. 14, 1992 (entered into force Sep. 14, 1992) http://www.fao.org/docrep/W7414B/w7414b0y.htm>, (visited Jun. 12, 2003), "[w]ishing to consolidate the existing friendly relations by promoting regional water resources development on the basis of the rules relating to the uses of the waters of international rivers approved in 1966 at Helsinki by the 52nd Conference of the International Law Association."

[108] *See* Danilenko, *supra* note 30, at 173.

[109] Cassese, A., *International Law* (Oxford University Press, Oxford 2001), at 156.

[110] Danilenko, *supra* note 30, at 174.

compromise between the two positions. The term "recognised by civilised nations" is a legacy of colonialism and for all practical purposes is ignored or replaced with "peace-loving nations."[111]

It is not entirely clear what was intended by the final compromise version of Article 38(1)(c). Does the Article refer to general principles of national law, general principles of international law, or both? The use of general principles of national law implies recourse to general principles common to all or most domestic legal systems. While this involves consideration of more than 190 legal systems, there are basic principles which are common to all.[112] However, due to the unique nature of the international legal system, importing general principles of national law may require a certain amount of adaptation. As Judge McNair states in his separate opinion in the *Advisory Opinion on South-West Africa*:

> "The way in which international law borrows from this source is not by means of importing private law institutions 'lock, stock and barrel', ready-made and fully equipped with a set of rules. It would be difficult to reconcile such a process with the application of 'the general principles of law'." [113]

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[111] *See* Article 4 of the UN Charter, *supra* note 21. *See* Dissenting opinion of Judge Ammoun, North Sea Continental Shelf Cases, *supra* note 46, at 132-133:

> "The discrimination between civilized nations and uncivilized nations, which was unknown to the founding fathers of international law, the protagonists of a universal law of nations, Vittoria, Suarez, Gentilis, Pufendorf, Vattel, is the legacy of the period, now passed away, of colonialism, and of the time long- past when a limited number of Powers established the rules, of custom or of treaty-law, of a European law applied in relation to the whole community of nations."

[112] Malanzcuk, *supra* note 12, at 49.

[113] Advisory Opinion International States of South-west Africa, 1950 ICJ 128 (Jul. 11).

Some writers have questioned the validity of the latter approach because what States are willing to agree to at the national level may differ from what they are willing to accept in their international relations.[114] They therefore maintain that Article 38(1)(c) refers only to general principles of *international law*.[115]

The practice of the ICJ, or its predecessor the Permanent Court of International Justice (PCIJ), does not appear to favour either approach, and in the limited cases where general principles of law have been referred to, would seem to support both approaches without it being clear which has been adopted. For example, in the *Factory at Chorzów* case the PCIJ stated that "it is a principle of international law, and even a general conception of law, that any breach of an engagement involves an obligation to make reparation." [116] In the *Corfu Channel* case, the ICJ noted in reference to inferences of fact and circumstantial evidence that "this indirect evidence is admitted in all systems of law and its use is recognised by international decisions."[117]

The most commonly favoured approach is to accept that both general principles of international law and national law are covered by Article 38(1)(c) of the Statute of the

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[114] Tunkin, G.I., "International Law in the International System", 147 Recueil des Cours 1, (1975 IV), at 98-106), Danilenko, *supra* note 30, at 179.
[115] *Id.*
[116] Factory at Chorzów case 1928 P.C.I.J. (Ser. A) No. 17, at 29).
[117] The Corfu Channel Case (U.K. v. Alb.) 1949 I.C.J. 4 (Apr. 9), at 18.

ICJ.[118] However, it should be remembered that the role of principles in the international legal system is very limited. As Jennings notes, the ICJ has seldom applied general principles of law, "since as a rule conventional and customary international law has been significant to supply the necessary basis of decision."[119]

1.3.5 Judicial decisions and writings of the most highly qualified publicists

Judicial decisions and writings of publicists are considered subsidiary sources of international law because rather than creating law, they point to where the law can be found. Where the conclusions of a decision of a Court are supported by international authorities on the topic and logically and convincingly reasoned, there is value in using this research, particularly if the conclusions derive from an authority such as the ICJ, or from a well respected writer.[120]

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[118] Shaw, M.N., *International Law* (4th Ed., Cambridge University Press, Cambridge 1997), at 78-79, writes:

> "it is not clear, however, in all cases, whether what is involved is a general principle of law appearing in municipal systems or a general principle of international law. But perhaps this is not a terribly serious problem since both municipal legal concepts and those derived from existing international practice can be defined as falling within the recognised catchment area."

Malanczuk, *supra* note 12, at 48, writes:

> "...the greater the number of meanings which the phrase possesses, the greater the chance of finding something to fill gaps in treaty law and customary law – which was the reason for listing general principles of law in the Statute of the Court in the first place. Indeed, international tribunals had applied general principles of law in both these senses for many years before the PCIJ was set up in 1920."

[119] Jennings, *supra* note 9, at 38.
[120] Zemanek, K., "The Legal Foundations of the International System", 266 Recueil des Cours 9 (1997), at 137.

Some writers maintain that judicial decisions, particularly those of the ICJ, are not only subsidiary sources of international law but can also create new law.[121] Such claims arise despite the inclusion of Article 59 in the Statute of the International Court of Justice, which provides that "the decision of the Court has no binding force except between the parties and in respect of that particular case."[122] However, given the authoritative standing and reasoned opinions of many of the ICJ's decisions, it would seem that they have an effect beyond the particular case at issue. While there is no rule of *stare decisis* in international law courts, the ICJ will almost always take previous decisions into account.[123] States may also be inclined to take ICJ decisions as guidance on the status of international custom and act accordingly, thus further influencing the development of international custom.[124]

Conclusion

This chapter has shown that international law is a unique system that regulates State conduct. States are the chief law-makers within the international legal system, and are responsible for failing to comply with their international legal obligations. This chapter has further illustrated that there is a clear process by which international law can be created and identified. Despite recent challenges, it has been shown that the process for creating and identifying international law remains based on Article 38(1) of the Statute of

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[121] *See* Lauterpacht, E., *The Development of International Law by the International Court* 21 (Stevens Ltd., London 1958).
[122] Statute of ICJ, *supra* note 30.
[123] In the Kasikili/ Sedudu Island Case, for example the ICJ citied two of its previous decisions in support of Article 31 of the Vienna Convention being representative of international custom, the 1994 Territorial

International Court of Justice. The primary sources are therefore treaties, international custom and general principles of law; and the subsidiary sources are general principles of law and the writings of publicists. Also, the chapter has explained the type and weight of evidence required in order to prove the existence of each of the primary sources. In so doing, the chapter has provided the foundations for a study of the relationship between the concept of sustainable development and international law.

Dispute Case and the 1996 Oil Platforms Case. Case Concerning Kasikili/ Sedudu Island (Bots. v. Namib), Dec. 13, 1999, *reprinted in* 39 I.L.M. 310 (2000), para. 18.

[124] Malanczuk, *supra* note 12, at 43.

CHAPTER TWO

WHAT IS SUSTAINABLE DEVELOPMENT?

Prior to analysing the relationship between sustainable development and international law it is necessary to understand what is meant by "sustainable development."[1] This chapter is therefore dedicated to building up an understanding of the key elements of sustainable development. The approach taken will be to look at the evolution the term "sustainable development" from the beginnings of an international development policy in the 1940s to the present day general acceptance of the goal of sustainable development. In this manner the chapter will be able to identify the many complexities surrounding the usage of the term sustainable development.

2.1 The Emergence of International Development

"Development" became a widespread concern of the international community in the 1940s. In a century that had witnessed two World Wars and major economic crises, development was seen as having a role in ensuring peace and security. Evidence that the international community considered development important can be found in the Charter of the United Nations.[2] Article 55 called on the UN to promote "higher standards of living, full employment, and conditions of economic and social progress and development." Pursuant to Article 56 all Members agreed "to take joint and separate action" to achieve the goals under Article 55. Further evidence of the concern over

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[1] The meaning of "sustainable development" has sparked considered debate, s*ee generally* Kirby, J., *et al*., *Sustainable Development* (Earthscan Publications Ltd., London 1995).

international development can be found in US President Harry S Truman's inaugural speech of 1949, where he stated that:

> "We must embark on a bold new program for making the benefits of our scientific and industrial progress available for the improvement and growth of underdeveloped areas.
>
> The old imperialism – exploitation for foreign profit – has no place in our plans. What we envisage is a program of development based on the concepts of democratic fair dealing."[3]

Truman's speech is considered to mark the beginning of what has been described as the "development era."[4] Four years later the UN General Assembly pledged financial support to "assist development and reconstruction in underdeveloped countries."[5] In this early period development was to be attained largely through the developed countries providing financial assistance to developing countries. A major motivation for developed countries during this initial period was a desire to foster strategic political ties during the cold war period.[6]

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[2] Article 1 of the Charter of the United Nations, June 26, 1945, 1 U.N.T.S. xvi (entered into force Oct. 24, 1945).
[3] Truman 1949, *as quoted in* Esteva, G., 'Development', *in* Sachs, W., ed., *The Development Dictionary: A Guide to Knowledge as Power*, 6 (London, Zed Books 1992), at 6.
[4] *Id*.
[5] *Economic Development of Under-developed Countries*, G.A. Res. 724(VIII), U.N. GAOR, 8th Sess., 468th plen. mtg., U.N. Doc. A/RES/724(VIII) (1953), *in* Rausching, D., *et al*., eds., *Key Resolutions of the United Nations General Assembly 1946-1996,* 198 (Cambridge University Press, Cambridge 1997), at 198.
[6] Matsui, Y., "The Road to Sustainable Development: Evolution of the Concept of Development in the UN," *in* Ginther, K., *et al*. eds., *Sustainable Development and Good Governance*, 54 (Martinus Nijhoff Publishers, Dordrecht 1995), at 54.

Financial assistance to developing countries was to be supported by reforms of the world economic order – reforms that were based on the idea that if the world economy prospered, everybody prospered. In 1944, three key economic institutions (the so called, "Bretton Woods Institutions") were established: the International Monetary Fund (IMF),[7] the International Bank for Reconstruction and Development (IBRD),[8] and the General Agreement on Trade and Tariffs (GATT).[9] The IMF was created to monitor and advise member States on their economic policies and provide financial assistance to member States experiencing balance of payment problems.[10] The IBRD, now part of the World Bank Group, was established to provide favourable loans to accelerate post war reconstruction and assist development in the least developed countries.[11] The GATT, which has evolved into the World Trade Organisation (WTO), was designed to liberalise international commerce.[12] Decision-making in the Bretton Woods Institutions was based on how much capital States invested, which meant that developed countries denominated the decision-making within the world economic order.[13]

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[7] Article 1 of the Articles of Agreement of the International Monetary Fund, July 22, 1944 (entered into force Dec. 27, 1944), *reprinted at* <http://www.imf.org/external/pubs/ft/aa/index.htm>, (visited Jun. 12, 2003). To date 183 States are members of the IMF, <http://www.imf.org/external/np/sec/memdir/members.htm>, (visited Jun. 13, 2003).

[8] Articles of Agreement of the International Bank for Reconstruction and Development, July 22, 1944, *reprinted at* <http://www.worldbank.org/html/extdr/arttoc.htm>, (visited Jun. 12, 2003). To date 183 States are members of the International Bank for Reconstruction and Development, <http://www.worldbank.org/html/extdr/about/members/>, (visited Jun. 13, 2003).

[9] General Agreement on Trades and Tariffs, Oct. 30, 1947, *reprinted at* < http://www.wto.org/english/docs_e/legal_e/gatt47_01_e.htm>, (Jun. 12, 2003). There are now 142 members of the WTO, <http://www.wto.org/english/thewto_e/whatis_e/tif_e/ org6_e.htm> , (visited Jun. 13, 2003).

[10] Article 1, *supra* note 7.

[11] Article 1(i), *supra* note 8.

[12] Preamble, *supra* note 9.

[13] Hewitt, T., "Half a Century of Development," *in* Allen, T., & Thomas, A., *Poverty and Development into the 21st Century*, 289 (Oxford University Press, Oxford 2000), at 291. Control of both the IMF and the IBRD was, and still is, determined by percentage contributions resulting in a dominant role played by G7

2.2 The Emergence of a "Third World" Voice

The decolonisation movement had a significant impact on international development policy. The granting of political independence to colonial territories gathered considerable momentum in the 1960s.[14] Pursuant to this independence, all "peoples" were entitled to "freely pursue their economic, social and cultural development."[15] However, due to a heavy dependence on the export of raw materials to developed countries, the political independence that resulted from decolonisation could not guarantee most developing countries economic independence. The developing countries therefore advocated for a right of permanent sovereignty over natural resources, which would give them an "inalienable right … freely to dispose of their natural wealth and resources in accordance with their national interests, and in respect of economic independence of States."[16]

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countries. *See* IMF Members' Quotas and Voting Power, and IMF Governor, <http://www.imf.org/external/np/sec/memdir/members.htm>, (visited Jun. 18, 2003), and Membership in the World Bank Group, <http://www.worldbank.org/html/extdr/about/members/>, (visited Jun. 18, 2003).

[14] The International Community is now more fully representative of developed and developing nations - more than 80 nations whose peoples were under colonial rule have joined the United Nations as sovereign independent states since the UN was founded in 1945 (*Basic Facts about the UN*, (UN Dept. of Public Information, New York 2003). The 1960s alone saw the following countries join the UN: Algeria, Barbados, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Cyprus, Democratic Republic of the Congo, Democratic Yemen, Equatorial Guinea, Gabon, Gambia, Guyana, Jamaica, Kenya, Kuwait, Lesotho, Madagascar, Malawi, Mali, Maldives, Malta, Mauritania, Mauritius, Mongolia, Niger, Nigeria, Rwanda, Senegal, Somalia, Togo, Sierra Leone, Singapore, Swaziland, Trinidad and Tobago, Uganda, United Republic of Tanzania, Zambia.

[15] *Declaration on the Granting of Independence to Colonial Territories*, G.A Res. 1514(XV), U.N. GAOR, Supp. (No. 16), at 66, U.N. Doc. A/4684 (1961), *reprinted in* Raushing, D., *et al.*, eds., *Key Resolutions of the United Nations General Assembly 1946-1996*, 107 (Cambridge University Press, Cambridge 1997). Self-determination was also endorsed by the International Covenant on Civil and Political Rights, Dec. 19, 1966 (entered into force Mar. 23, 1976), *reprinted in* 6 I.L.M. 368 (1967), and International Covenant on Economic, Social and Cultural Rights, Dec. 19, 1966 (entered into force Jan. 3, 1976), *reprinted in* 6 I.L.M. 360 (1967).

[16] *Permanent Sovereignty over Natural Resources*, G.A. Res. 1803 (XVII), U.N. GAOR Supp. (No. 17), U.N. Doc. A/5217 (1962), *reprinted in* 2 I.L.M. 223 (1963). *See also* International Covenant on Civil and Political Rights, *supra* note 15; International Covenant on Economic, Social and Cultural Rights, *supra* note 15; African Charter on Human Rights and People's Rights, Jan. 19, 1981 (entered into force Oct. 21,

By the end of the 1960s the developing countries had formed a significant coalition known as the Group of 77 (G77).[17] This coalition ensured that developing countries had for the first time a strong voice by which to further their common aims and highlight common concerns. A major concern, which the G77 saw as impeding their development, was a perceived inequity in the existing international economic order.[18] The G77 advocated a restructuring of the world's legal and institutional economic order under the rubric of the New International Economic Order (NIEO).[19] The proposed NIEO, articulated through a number of UN GA Resolutions,[20] consisted of three main elements for ensuring development within the G77 countries: firstly, States were to have greater control over their national economic activities;[21] secondly, developing countries were to

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1986), *reprinted in* 21 I.L.M. 58 (1982); Vienna Convention on Succession of States in Respect of Treaties, Aug. 22, *reprinted in* 17 I.L.M. 1488 (1978) (entered into force Nov. 6, 1966); Vienna Convention on Succession of States in Respect of State Property, Archives and Debts, Apr. 7, 1983 (not yet entered into force), *reprinted in* 22 I.L.M. 306 (1983); UN Convention on the Law of the Sea, Dec. 10, 1982, *reprinted in* 21 I.L.M. 1261 (entered into force Nov. 16, 1994).

[17] The Group of 77 was established on the 15th June, 1964 at the conclusion of the first UN Conference on Trade and Development (*See* UNESCO, *Establishment of the Group of 77*, <http://www.unesco.org/delegates/g77/history/establishment-of-g77.html>, (visited Oct. 10, 2003).

[18] Developing countries, constituting 70 percent of the world's population, accounted for only 30 percent of the world's income. *See* Preamble of the *Declaration on the Establishment of a New International Economic Order,* G.A. Res. 3201 (S-VI), U.N. GAOR, 6th Spec. sess., 2229th Plen. mtg., U.N. Doc. A/RES/3201(S-VI) (1974), *reprinted in* 13 I.L.M. 715 (1974).

[19] The foundations of the NIEO are set forth in the following international instruments: NIEO Declaration, *id.*; *Programme of Action on the Establishment of a New International Economic Order*, G.A. Res. 3202 (S-VI), U.N. GAOR, 6th Spec. sess., 2229th plen. mtg., U.N. Doc. A/RES/3202(S-VI) (1974), *reprinted in* 13 I.L.M. 720 (1974); *Development and International Economic Cooperation*, G.A. Res. 3362(S-VII), U.N. GAOR, 7th Spec. sess., 2349th Plen. mtg., U.N. Doc. A/RES/3362(S-VII) (1975), *reprinted in* Mutharika, A.P., ed., *International Law of Development,* 639 (Oceana Publications Inc., New York 1978); and *Charter of Economic Rights and Duties of States,* GA Res. 3281 (XXIX), U.N. GAOR, 29th Sess., Supp. (No. 31), UN Doc. A/Res/3281(XXIX) (1975), *reprinted in* 14 I.L.M. 251 (1975).

[20] *Id.*

[21] *See* Article 2 of the Charter of the Economic Rights and Duties of States, *supra* note 19, noted that:

> "1. Every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities.

be given equitable access to world markets;[22] and thirdly, financial and technical assistance should be provided to developing countries during the transition to the NIEO.[23]

The proposed NIEO ultimately failed to gain the widespread support necessary to ensure its implementation.[24] Disagreement between developed and developing countries arose,

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2. Each State has the right:

(a) To regulate and exercise authority over foreign investment within its national jurisdiction in accordance with its laws and regulations and in conformity with its national objectives and priorities. No State shall be compelled to grant preferential treatment to foreign investment;

(b) To regulate and supervise the activities of transnational corporation within its national jurisdiction and take measures to ensure that such activities comply with its laws, rules and regulations and conform with its economic and social policies. Transnational corporations shall not intervene in the internal affairs of a host State. Every State should, with full regard for its sovereign rights, co-operate with other States in the exercise of the right set forth in this subparagraph;

(c) To nationalise, expropriate or transfer ownership of foreign property, in which case appropriate compensation should be paid by the State adopting such measures, taking into account its relevant laws and regulations and all circumstances that the State considers pertinent. In any case where the question of compensation give rise to a controversy, it shall be settled under the domestic law of the nationalising State and by its tribunals, unless it is freely and mutually agreed by all States concerned that other peaceful means be sought on the basis of the sovereign equality of States and in accordance with the principle of free choice of means."

[22] *See* Article 8 of the Charter of the Economic Rights and Duties of States, *supra* note 19: "States should co-operate in facilitating more rational and equitable international economic relations and in encouraging structural changes in the context of a balanced world economy in harmony with the needs and interests of all countries, especially developing countries, and should take appropriate measures to this end." *See also* Section II of NIEO Programme of Action, *supra* note 19.

[23] *See* Article 4(k) of NIEO Declaration, *supra* note 19, noting that the NIEO should be founded, *inter alia*, on the "[e]xtension of active assistance to developing countries by the whole international community, free of any political or military conditions." *See also* Article 13 of UN Charter of Economic Rights and Duties of States, *supra* note 19.

[24] *See* Vote on UN GA Res. 3281(XXIX), *reprinted in* 14 I.L.M. 255 (1975). Within the GA Assembly, Belgium, Denmark, the Federal Republic of Germany, Luxembourg, the United Kingdom and the US, voting against the Charter of the Economic Rights and Duties of States, while Austria, Canada, France, Ireland, Israel, Italy, Japan, the Netherlands, Norway, and Spain abstained. The Declaration and Programme of Action on the Establishment of the NIEO was adopted by consensus, although the Federal Republic of Germany (incorporating the reservations of the EC), France, Japan, the UK and the US all attached reservations. *See* Reservations by U.S. to the Declaration and Programme of Action on the Establishment of a New International Economic Order, May 1, 1974, *reprinted in* 13 I.L.M. 744; Reservations by F.R.G. to the Declaration and Programme of Action on the Establishment of a New

inter alia, over the nationalisation of foreign property, the regulation of multinational companies, the establishment of producer associations and the introduction of artificial or fixed pricing arrangements in international trade.[25] However, the fact that the developing countries were able to pursue their demands for a NIEO through UN GA Resolutions is testimony to their increased influence in shaping and defining international development policy.

2.3 Development and Human Rights

The NIEO was built largely on the premise that increased economic development at the State level would lead to improved conditions for all citizens within a State.[26] However, State economic development did not always equate to economic and social development for all. In some developing countries a focus on economic reforms and financial assistance had led to State officials becoming rich on the back of development while the majority of the country's citizens became poorer and were denied fundamental rights and freedoms.[27] A broader definition of "development" was needed, one that covered not only State-State relations but also the relationship between a State and its citizens. The

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International Economic Order, May 1, 1974, UN Doc. A/PV2229, *in* 13 I.L.M. 749; Reservations by France to the Declaration and Programme of Action on the Establishment of a New International Economic Order, May 1, 1974, UN Doc. A/PV2229, *reprinted in* 13 I.L.M. 753; Reservations by Japan to the Declaration and Programme of Action on the Establishment of a New International Economic Order, May 2, 1974, UN Doc. A/PV2230, *reprinted in* 13 I.L.M. 759; Reservations by U.K. to the Declaration and Programme of Action on the Establishment of a New International Economic Order, May 2, 1974, UN Doc. A/PV2231, *reprinted in* 13 I.L.M. 762.

[25] *Id.*

[26] Although Article 7 of the Charter of Economic Rights and Duties of States, *supra* note 19, provided that:

> "Every State has the primary responsibility to promote the economic, social and cultural development of its people. To this end, each State has the right and the responsibility to choose its means and goals of development, fully to mobilize and use its resources, to implement progressive economic and social reforms and to ensure the full participation of its people in the process and benefits of development."

1980 Third UN International Development Strategy encapsulated the broader definition by proclaiming that "the ultimate aim of development is the constant improvement of the well-being of the entire population on the basis of its full participation in the process of development and a fair distribution of the benefits therefrom."[28]

This expansive approach to international development also found expression in the 1986 UN GA Resolution entitled, "Declaration on the Right to Development," which stated that "the human person is the central subject of development and should be the active participant and beneficiary of the right to development."[29] The Declaration described the "right to development" as "a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom."[30] The primary focus of "development", according to the Declaration on the Right to Development, "development" focuses on the "constant improvement of the well-being of

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[27] Matsui, *supra* note 6, at 60.
[28] *International Development Strategy for the Third United Nations Development Decade*, G.A. Res. 35/56, U.N. GAOR 35th Sess., 83rd Plen. mtg., U.N. Doc. A/Res/35/36 (1980), *reprinted in* 20 I.L.M. 480 (1981).
[29] Article 2(1) of the *Declaration on the Right to Development*, G.A. Res. 41/128, U.N. GAOR, 41st Sess., 97th plen. mtg., U.N. Doc. A/Res/41/128 (1986), *in* Raushcing, D., *et al., Key Resolutions of the United Nations General Assembly 1946-1996*, 241 (Cambridge University Press, Cambridge 1997), adopted by 146 votes to 1(US) with 8 abstentions (Denmark, FRG, Finland, Iceland, Israel, Sweden and UK). *See also* African Charter on Human Rights and People's Rights, *supra* note 16; and *Declaration on the Progressive Development of Principles of Public International Law Relating to a New International Economic Order*, adopted at 62nd Conference of the ILA, Seoul, Korea, 1986, *in* Waart, P. de., *et al*., eds., International Law and Development, 410 (Martinus Nijhoff Publishers, Dordrecht 1988). The President of the Senegal Supreme Court, Keba M'Baye, is credited with the first articulation of the "right to development" in his 1972 lecture to the International Institute of Human Rights in Strasbourg (*see* Bunn, I.D., "The Right to Development: Implications for International Economic Law," 15 Am. U. Int'l L. Rev. 1425 (2000)).
[30] *Id.,* Article 1(1).

the human person", and not the State. That having been said, economic development at the State level should however contribute to the constant improvement in the well-being of all the individuals within a State.

2.4 Development and Environmental Protection

During the 1970s, the protection of the environment became widely recognised as a factor that had the potential to place limits on economic and social development in both developing and developed countries. Publications such as Carson's *Silent Spring*[31] and Meadow's *The Limits to Growth*[32] helped to highlight the many complex and interrelated ways in which unfettered industrialisation was damaging the environment. Major environmental issues of the time included pollution, the threat to biological diversity, and the overexploitation of natural resources.[33] The gravity of some of the world's environmental issues motivated the UN to hold a Conference on the Human Environment in 1972 at Stockholm.[34] The 1972 Stockholm Conference was to "serve as a practical means to encourage, and to provide guidelines for, action … to improve the environment and to remedy and prevent its impairment."[35] A record number of States attended the

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[31] Carson, R.L, *Silent Spring* (Hamish Hamilton, London 1962).
[32] Meadows, D.H., *et al*, The Limits to Growth – A Report for the Club of Rome's Project on the Predicament of Mankind (Earth Island Ltd., London 1972).
[33] *See* Preamble of the Declaration of the UN Conference on the Human Environment, June 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1416 (1972).
[34] *UN Conference on the Human Environment*, UN GA Res. 2581 (XXIV), Jan. 8, 1969, UN Doc. A/Conf.48/ 14/Rev.1*., reprinted in* 9 I.L.M. 427 (1970); *Decision to convene an UN Conference on the Human Environment,* UN GA Res. 2398(XXIII), Dec. 3, 1968.
[35] *Id.*

conference, along with a large number of intergovernmental and non-governmental institutions.[36]

Balancing the interests of developed and developing States proved difficult to achieve at Stockholm. In essence, developing countries considered that international environmental concerns were caused by centuries of industrialisation in developed countries, and proposed that the developed countries should thus bear the burden of remedying the situation.[37] What is more, developing countries maintained that the imposition of environmental measures were a hindrance to their own economic development.[38] The difference of opinion between developed and developing countries was largely to blame for the outcome of the Stockholm Conference, the Stockholm Declaration,[39] being "a document with no binding legislative imperatives." [40] The declaration was however to have a "moral authority, that will inspire in the hearts of men the desire to live in harmony with each other, and with their environment."[41]

The importance of the Stockholm Declaration is in its attempt to link environmental protection with economic and social development. The preamble of the Stockholm

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[36] Although the Former Soviet Union and most of its allies did not attend (UNEP, *Global Environmental Outlook 3 – Past, Present and Future Perspectives* (Earthscan Publications Ltd., London 2002), at 4).
[37] Handl, G., "Environmental Security and Global Change: The Challenge to International Law," 1 Y.B. Int'l Envt'l L. 3 (1990), at 28.
[38] *Id.*
[39] Stockholm Declaration, *supra* note 33. The Conference also adopted a number of other documents, including the Action Plan on the Environment, June 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1421 (1972); and the Resolution on Institutional and Financial Arrangements, June 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1466 (1972).
[40] Prof. Mostafa K. Tolba, Head of the Egyptian delegation to the Stockholm Conference, quoted in UNEP, *supra* note 36, at 3.

Declaration, for example, recognised that "to defend and improve the human environment for present and future generations has become an imperative goal for mankind – a goal to be pursued together with, and *in harmony with*, the established and fundamental goals of peace and of worldwide economic and social development" [emphasis added].[42]

The Stockholm Declaration focused more on the protection of the environment than on social and economic development, although the need to integrate the two was expressly recognised. Principle 1 provided that:

> "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations." [43]

The Declaration also noted in Principle 2 that "the natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate."[44]

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[41] *Id.*
[42] Stockholm Declaration, *supra* note 33.
[43] Stockholm Declaration, *supra* note 33.

The recommended roles and responsibilities of developed and developing States found expression in the Stockholm Declaration. For example, Principle 9 noted that "environmental deficiencies generated by the conditions of under-development and natural disasters pose grave problems and can best be remedied by accelerated development through the transfer of substantial quantities of financial and technological assistance as a supplement to the domestic effort of the developing countries and such timely assistance as may be required."[45] Additionally, Principle 12 provided that:

> "Resources should be made available to preserve and improve the environment, taking into account the circumstances and particular requirements of developing countries and any costs which may emanate from their incorporating environmental safeguards into their development planning and the need for making available to them, upon their request, additional international technical and financial assistance for this purpose.[46]"

The Declaration also conceded that the level of environmental protection in "the most advanced countries" may not be appropriate in all countries.[47]

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[44] Stockholm Declaration, *supra* note 33. Principles 3 to 7 dealt with various aspects of environmental protection including renewable and non-renewable resources, nature conservation, and terrestrial and marine pollution.
[45] Stockholm Declaration, *supra* note 33.
[46] Stockholm Declaration, *supra* note 33.
[47] Stockholm Declaration, *supra* note 33, Principle 23:

> "Without prejudice to such criteria as may be agreed upon by the international community, or to standards which will have to be determined nationally, it will be essential in all cases to consider the systems of values prevailing in each country, and the extent of the applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for the developing countries."

A process for integrating environmental concerns into development planning was encouraged in the Stockholm Declaration. Principle 13 provided that, "States should adopt an integrated and co-ordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve environment for the benefit of their population."[48] Similarly, Principle 14 noted that "rational planning constitutes an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment."[49]

The provisions of the Stockholm Declaration noted above reflect some of the key elements of what would later be known as "sustainable development." These key elements included safeguarding the environment for present and future generations, ensuring accelerated development in order to protect the environment of the least developed countries, accepting differentiated roles and responsibility for developed and developing countries, particularly in the transfer of finance and technology and the need to integrate environmental concerns into the development planning process.

The Stockholm Declaration's approach to reconciling environmental protection with economic and social development was taken up in the UN's Third Development Strategy of 1980.[50] The Strategy is significant to this discussion in its use and approach of the

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[48] *Stockholm Declaration, supra* note 33.
[49] Stockholm Declaration, *supra* note 33.
[50] Third Development Strategy, *supra* note 28. The First UN Development Decade was launched at the sixteenth session of the General Assembly, "as the first world-wide effort of all peoples to give substance, within a reasonable span of time, to the solemn undertaking, embodied in the Charter of the United

term "sustainable", noting that "there is a need to ensure an economic development process which is environmentally *sustainable* over the long run and which protects the ecological balance" [emphasis added].[51] The UN Third Development Strategy also recognised the interrelationship between development and protection of the environment, maintaining that:

> "Accelerated development in developing countries could enhance their capacity to improve their environment. The environmental implications of poverty and underdevelopment and the interrelationship between development, environment, population and resources must be taken into account in the process of development."[52]

The World Conservation Strategy, published in the same year as the International Development Strategy also included the term "sustainable" – stating that, "for *development* to be *sustainable* it must take account of social and ecological factors, as well as economic ones: of the living and non-living resource base: and of the long term as well as the short term advantages and disadvantages of alternative action" [emphasis added].[53] Both the International Development Strategy and the World Conservation Strategy, in their use of the term "sustainable", focused on sustaining the environment.

Nations, to promote social progress and better standards of life in larger freedom" (*United Nations Development Decade*, G.A. Res. 2084, U.N. GAOR, 1404th Plen. mtg., U.N. Doc. A/RES/2084 (1965)).

[51] *Id.*

[52] Third Development Strategy, *supra* note 27.

[53] IUCN, UNEP & WWF., *World Conservation Strategy* (Switzerland, IUCN 1980). The *World Conservation Strategy* was based on a collaborative effort of more than 450 government agencies and conservations agencies.

In 1987, the World Commission on Environment and Development (WCED) published its highly influential report entitled, *Our Common Future* (commonly referred to as the "Brundtland Report"). [54] The Brundtland Report has been described as marking "the … political coming of age" of sustainable development.[55] The Brundtlund Report focused on sustaining economic and social development. *Sustainable* development was defined in the Brundtland report as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[56] The report identified two key elements of sustainable development: "the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organisation on the environment's ability to meet present and future needs."[57]

The Brundtland report marks a subtle shift in the meaning of sustainable development. While both the International Development Strategy and the World Conservation Strategy, in their use of the term "sustainable" focused on sustaining the environment, or the natural and non-living resource base, as a foundation on which economic and social development could take place, the focus of the Brundtland definition was on sustaining economic and social development for all individuals, including present and future

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[54] WCED, *Our Common Future* (Oxford University Press, Oxford 1987), at 43. The establishment of the World Commission on Environment and Development was requested by the UN General Assembly at its 38th Session in 1983 (UN GA Res. 38/161). The Commission was comprised of an international group of politicians, civil servants and experts on environment and development (*Id.* at 352).
[55] Kirby, *supra* note 1, at 1.
[56] WCED, *supra* note 54, at 43.
[57] *Id.*

generations. Obviously, given the close relationship between the environment and development, protecting the environment was still fundamental to this definition.

The Brundtland Report formed the basis for negotiations at the 1992 UN Conference on Environment and Development, held in Rio de Janeiro. The main objective of the Rio Conference was to:

> "…recommend measures to be taken at the national and international levels to protect and enhance the environment, taking into account the specific needs of developing countries, through the development and implementation of policies for sustainable and environmentally sound development with special emphasis on incorporating environmental concerns in the economic and social process.[58]

Heads or senior officials of 179 governments, hundreds of officials from UN organizations, scientific, legal and other experts, businesses and NGOs attended the Rio Conference.[59] The Conference has been described, *inter alia,* as a "turning point",[60] "the culmination of a process",[61] "the political legitimisation of Sustainable

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[58] Section I(15)(c) of *United Nations Conference on Environment and Development*, G.A. Res. 44/228, U.N. GAOR, 44th Sess., 85th Plen. Mtg., U.N. Doc. A/RES/44228 (1989), *reprinted at* <http://www.un.org/documents/ga/res/44/ares44-228.htm>, (visited Jun. 13, 2003).
[59] For a summary of UNCED proceedings, *see* Earth Negotiations Bulletin – Volume One, *available at* <http://www.iisd.ca/vol01/#prepcomiv>, (visited Jun 18, 2003).
[60] Mock, A., & Rach-Kallat, M., *Forward to* Lang. W. ed., *Sustainable Development and International Law*, i (Martinus Nijhoff Publishers, Dordrecht 1995), at xiii.
[61] Hossain, K., "Evolving Principles of Sustainable Development and Good Governance," *in* Ginther, D., *et al*., eds., *Sustainable Development and Good Governance*, 15 (Martinus Nijhoff Publishers, Dordrecht 1995), at 15.

Development",[62] "a major paradigm shift",[63] "a new beginning",[64] and "revolutionary".[65] In material terms, the Rio Conference produced two Conventions, the Framework Convention on Climate Change[66] and the Convention on Biological Diversity;[67] and three nonbinding instruments, the Declaration on Environment and Development (Rio Declaration),[68] Agenda 21,[69] and the Statement of Forest Principles.[70]

The adoption of the Rio Declaration, by consensus,[71] marked the widespread acceptance by the international community of the goal of sustainable development. Yet, like the Stockholm Conference, States proved reluctant to sign up to a legally binding document defining general rights and obligations relating to development and the environment.[72]

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[62] Timoshenko, A.S., "From Stockholm to Rio: Institutionalisation of Sustainable Development," *in* Lang, W. (ed.), *Sustainable Development and International Law*, 143 (Martinus Nijhoff Publishers, Dordrecht 1995), at 144.
[63] Sand, P., "International Environmental Law after Rio," 4 Eur. J. Int'l L 378 (1992), at 382.
[64] Silveria, M.P.W., 'The Rio Process: Marriage of Environment and Development,' *in* Lang, W. ed., *Sustainable Development and International Law,* 9 (Martinus Nijhoff Publishers, Dordrecht 1995), at 10.
[65] *Id.*
[66] UN Framework Convention on Climate Change, May 9, 1992 (entered into force Mar. 24, 1994), *reprinted in* 31 I.L.M. 849 (1992).
[67] Convention on Biological Diversity, June 5, 1992 (entered into force Dec 29 1993), *reprinted in* 31 I.L.M. 822 (1992).
[68] *Declaration of the UN Conference on Environment and Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development*, Annex I, U.N. Doc. A/Conf.151/26 (Vol. I), reprinted in 31 I.L.M. 876 (1992).
[69] *Agenda 21: A Programme for Action for Sustainable Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development*, Annex II, U.N. Doc. A/Conf.151/26 (Vol. II) (1992).
[70] *Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests,* Rio de Janeiro, Jun. 13, 1992, *in Report of the UN Conference on Environment and Development,* UN Doc. A/Conf.151/26 (Vol. III), *reprinted in* 31 I.L.M. 882 (1992).
[71] There were, however, a number of "interpretative statements" attached to the final declaration, *see* Report of the United Nations Conference on Environment and Development, United Nations Conference on Environment and Development, U.N. Doc. A/CONF. 151/26 (vol. IV) (1992), at 20-22, and 25.
[72] Originally a more weightier "Earth Charter" was proposed by the Secretary-General of the Conference, Maurice Strong, but States preferred the adoption of a "Declaration" (*See* Kovar, J.D., "A Short Guide to the Rio Declaration", 4 Colo. J. Int'l Envtl. L. & Pol'y 119 (1993), at 119). The US, for example,

The Rio Declaration contained a set of principles that were designed to build on existing international consensus in the fields of development and environment, while promoting international cooperation in order to form "a global partnership for sustainable development."[73]

Certain key elements of sustainable development found expression in the Rio Declaration. In line with the Brundtland Report, a human centred approach was adopted whereby the focus of development was on meeting needs of present and future generations, especially the poor.[74] Environmental protection was also recognised as fundamental to sustainable development;[75] States were urged to "reduce and eliminate unsustainable patterns of production and consumption and promote demographic policies."[76] The special needs of developing countries were recognised,[77] together with the notion of common but differentiated responsibilities between developed and

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maintained that use of the term "Charter" raised unrealistic expectations over the legal content of the document, and would a replacement of the 1972 Stockholm Declaration (*id.*, at 123).

[73] Rio Declaration, *supra* note 68, Preamble.

[74] *See* Rio Declaration, *supra* note 68, Principle 1: "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature"; Principle 3: "The right to development must be fulfilled so as to equitable meet developmental and environmental needs of present and future generations."; and "All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world."

[75] Rio Declaration, *supra* note 68, Principle 7: "States shall cooperate in a sprite of global partnership to conserver, protect and restore the health and integrity of the Earth's ecosystem;" Principle 15: "In order to protect the environment, a precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

[76] Rio Declaration, *supra* note 68, Principle 8: "To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic patterns."

[77] Rio Declaration, *supra* note 63, Principle 6: "The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority.

developing countries.[78] States were urged to cooperate "to promote a supportive and open international economic system that would lead to economic growth and sustainable developing in all countries, to better address the problems of environmental degradation."[79] The Rio Declaration also sought to integrate environmental protection into the development process.[80] Integration was to be achieved in part by providing individuals with access to information concerning the environment and providing them with the opportunity to participate in decision-making processes.[81]

International actions in the field of environment and development should also address the interests and needs of all countries."

[78] Rio Declaration, *supra* note 63, Principle 7:

> "In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressure their societies place on the global environment and the technologies and financial resource they command."

Principle 9: "States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptations, diffusion and transfer of technologies, including new and innovative technologies."

[79] Rio Declaration, *supra* note 63, Principle 12:

> "States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing countries should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on international consensus."

[80] Rio Declaration, *supra* note 63, Principle 4: "In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it."

[81] Rio Declaration, *supra* note 63:

> "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making

2.5 Rio to Johannesburg

The international community's commitment to sustainable development has been re-confirmed in various international instruments, both binding[82] and non-binding,[83] since

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information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."

[82] *See for example* Article 3(4) of the UN Framework Convention on Climate Change, *supra* note 66*;* Preamble of the Agreement Establishing the WTO, Apr. 15, 1994 (entered into force Jan. 1, 1995), *reprinted in* 33 I.L.M. 1144 (1994); Article 2(1)(vii) of the Agreement Establishing the European Bank of Reconstruction and Development, May 29, 1990 (entered into force Mar. 28, 1991), *reprinted in* 29 I.L.M. 1077 (1990); Preamble to the North American Free Trade Agreement, Dec. 17, 1992 (entered into force Jan. 1, 1994), *reprinted at* <http:// http://www.nafta-sec-alena.org/english/index.htm>, (visited Jun. 12, 2003); Article 2 of the Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Oct. 14, 1994 (entered into force Oct. 14, 1994), 1954 U.N.T.S. 3; Article 19 of the Energy Charter Treaty, Dec. 17, 1994 (entered into force Apr. 16, 1998), *reprinted in* 34 I.L.M. 360 (1995); Article 1(1) of the ASEAN Agreement on the Conservation of Nature and Natural Resources, Jul. 9, 1985 (entered into force May 30, 1999), *reprinted at* <http://www.oceanlaw.net/texts/asean.htm>, (visited Jun. 12, 2003); Article 1(c) of the International Tropical Timber Agreement, Jan. 26, 1994 (entered into force Jan. 1, 1997), *reprinted at* < http://sedac.ciesin.org/pidb/texts/ITTA.1994.txt.html >, (Jun. 13, 2003); Article 6 of the Treaty of Amsterdam, Oct. 7, 1997 (entered into force May 1, 1999), O.J. (C 340) 145, *reprinted in* 37 I.L.M. 56 (1997); Article 1 of the Partnership Agreement between the Members of African, Caribbean and Pacific Group of States of the one Part and the European Community, of the other Part, Jun., 23, 2000 (entered into force Apr. 1, 2003), *reprinted at* <http://www.acpsec.org/gb/lome/cotonou1.pdf>, (visited Sep. 26, 2001).

[83] Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, *supra* note 65; *Vienna Declaration and Programme of Action*, World Conference on Human Rights, Vienna, Austria, June 14-25, 1993, UN Doc. A/Conf.157/23, <http://habitat.igc.org/undocs/vienna.html>, (visited Jun. 13, 2003); *Report of the Global Conference on the Sustainable Development of Small Island Developing States*, Bridgetown, Barbados, April 25 – May 6, 1994, UN Doc. A/CONF.167/9 (1994), < http://www.un.org/esa/sustdev/sids/sids.htm>, (visited Jun. 13, 2003); *Report of the International Conference on Population and Development*, Cairo, Egypt, Sept 5-13, 1994, UN Doc. A/Conf.171/13 (1994), Oct. 18, 1994, <http://www.un.org/popin/icpd2.htm>, (visited Jun. 13, 2003); *Report of the Fourth World Conference on Women*, Beijing, China, Sept 4-15, 1995, UN Doc. A/Conf. 177/20 (1995), <http://www.un.org/womenwatch/confer/beijing/reports/plateng.htm>, (visited Jun. 13, 2003); *Doha Ministerial Declaration of the Fourth Ministerial Conference*, Doha, Qatar, Nov. 14, 2001, *reprinted at* <http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm>, (visited Jun. 13, 2003), para. 6: "We strongly reaffirm our commitment to the objective of sustainable development, as stated in the Preamble to the Marrakesh Agreement. We are convinced that safeguarding an open and non-discriminatory multilateral trading system, and acting for the protection of the environment and the promotion of sustainable development can and must be mutually supportive;" *Report of the World Summit for Social Development*, Copenhagen, Denmark, March 6-12, 1995, UN Doc. A/Conf.166/9 (1995) <http://www.un.org/esa/socdev/wssd/>, (visited Jun. 13, 2003); *Declaration of the Third UN Conference on the Least Developed Countries*, Brussels, Belgium, May 14-20, 2001, U.N. Doc. A/Conf.19/L.20 (2001), <http://www.unctad.org/conference/>, (visited Jun. 13, 2003); *Malmö Ministerial Declaration, Governing Council of UNEP, Global Ministerial Environment Forum,* 6th Spec. Sess., 5th Plen. Mtg., May 31, 2000, *reprinted at* <www.unep.org/malmo/malmo_ministerial.htm>, (visited Jun. 13, 2003); *United*

the Rio conference. Most recently, the international community re-affirmed its commitment to sustainable development at the World Summit on Sustainable Development, in Johannesburg, 2002. The Johannesburg Declaration, recognised, "a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development – economic development, social development and environmental protection – at local, national and regional and global levels."[84] The Declaration further noted that, "poverty eradication, changing consumption and production patterns, and protecting and managing the natural resource base for economic and social development are overarching objectives of, and essential requirements for sustainable development."[85]

Nations Millennium Declaration, G.A. Res. 55/2, U.N. GAOR, 55th Sess., 8th Plen. Mtg., Agenda Item 60(b), U.N. Doc. A/Res/55/2 (2000), *available at* <http://www.un.org/millennium/declaration/ares552e.htm>, (last visited Jun. 13, 2003); *UN/ECE Ministerial Statement for the World Summit on Sustainable Development*, UN/ECE Regional Ministerial Meeting for the World Summit on Sustainable Development, Geneva, Switzerland, Sep. 24-25, 2001, U.N. Doc. ECE/ AC.22/2001/4/Rev.1 (2001), <http://www.johannesburgsummit.org/html/prep_process/europe_northamerica/european_prepcom_final_statement.pdf>, (visited Jun. 13, 2003); *Ten-year Review of Progress Achieved in the Implementation of the Outcome of the United Nations Conference on Environment and Development*, G.A. Res 55/199, U.N. GAOR, 55th Sess., 87th Plen. mtg., Agenda Item 95(a), U.N. Doc. A/Res/55/199 (2000), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003)**.** See also *Implementing Agenda 21, Report by the Secretary-General,* U.N. Commission on Sustainable Development, 2nd Sess., U.N. Doc. A/CN.17/2002/PC.2/7 (2001), *available at* <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003); *Progress in Preparatory Activities for the World Summit on Sustainable Development: Report of the Secretary-General*, 56th Sess., Agenda Item 98(a), U.N. Doc. A/56/379 (2001), <http://www.johannesburgsummit.org/html/documents/un_docs/a_56_379.pdf>, (visited Jun. 13, 2003); *Programme for the Further Implementation of Agenda 21,* G.A. Res. S/19-2, U.N. GAOR, 19th Spec. Sess., 11th Plen. Mtg., Agenda Item 8, U.N. Doc. A/Res/S-19/2 (1997)**.**

[84] *Johannesburg Declaration of the World Summit on Sustainable Development, Report of World Summit on Sustainable Development*, Johannesburg, South Africa, Aug. 26 – Sep. 4, 2002, at 1, U.N. Doc. A/Conf.199/20 (2002), *reprinted at* <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003).

[85] *Id.*

2.6 Sustainable Development: A Multifaceted Concept

Tracing the evolution of international policy relating to development, and later the protection of the environment, yields some interesting results. From essentially being concerned with providing financial assistance to "underdeveloped areas" on the basis of fostering political ties, sustainable development has evolved into a multifaceted concept which seeks to incorporate the aspirations of developed and developing countries; and integrate economic, social and environmental interests at the local, national, regional and international levels.

The UN Declaration on the Right to Development illustrates that "development" is defined as a goal of the international community - a goal that seeks to promote the constant improvement in the well-being of all individuals. The Brundtland Report endorsed the definition of development contained in the UN Declaration on the Right to Development, while also emphasising that protecting the environment is an integral part process of promoting the constant improvement of the well-being of present and future generations. "Sustainable development", the Brundtland Report concludes, can therefore be understood as a goal of the international community – that goal being to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

Given the extent of world poverty at present, meeting the needs of the present generation forms a major part of successfully promoting the goal of sustainable development. While

poverty can be viewed as an impediment to sustainable development, other key objectives must also be implemented, including protecting natural resources and ecosystems as a basis for economic and social development, changing consumption and production patterns, recognising the special needs of developing countries, and a providing a supportive and open international economic system. How has international law been applied in order to promote these key objectives of sustainable development? The following two chapters will explore this question.

CHAPTER THREE

WHAT IS THE LEGAL RELEVANCE OF SUSTAINABLE DEVELOPMENT?

The previous chapter maintained that in order to understand sustainable development in the context of international policy it was essential first to treat sustainable development as a goal which sought to integrate economic, social and environmental interests, and the attainment of which required certain key objectives to be satisfied. The purpose of this chapter is to further explore the relationship between sustainable development and international law by considering how it has been reflected within the sources of international law. This will involve an examination of the usage of the term sustainable development within treaty practice, non-binding instruments, judicial decisions, and the writings of publicists.

3.1 Treaties

Several treaties recognise sustainable development as an objective. Pursuant to the 1994 Agreement Establishing the WTO, for example, the parties recognise:

> "…that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the *objective* of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in

manner consistent with their respective needs and concerns at different levels of economic development" [emphasis added]. [1]

The objective of the 1994 Desertification Convention is "to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification … *with a view to contributing to the achievement of* sustainable development in affected areas" [emphasis added].[2] Similarly, the 1994 Tropical Timber Agreement notes that one of its objectives is "to contribute to the process of sustainable development."[3] Article 3 of the Climate Change Convention provides that the parties "shall be guided" by the principle that "the parties have the right to, and *should, promote* sustainable development" [emphasis added].[4]

Several regional treaties also recognise the objective of sustainable development. The EU Treaty of Amsterdam provides that "environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular *with a view to promoting* sustainable development" [emphasis added].[5] The 2000 Cotonou Agreement stipulates that "the partnership shall be centred on the objective of reducing and eventually eradicating

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[1] Preamble to the Agreement Establishing the WTO, Apr. 15, 1994 (entered into force Jan. 1, 1995), *reprinted in* 33 I.L.M. 1144 (1994).
[2] Article 2 of the Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Oct. 14, 1994 (entered into force Oct. 14, 1994), 1954 U.N.T.S. 3 (1994).
[3] Article 1(c) of the International Tropical Timber Agreement, Jan. 26, 1994 (entered into force Jan. 1, 1997), *reprinted at* < http://sedac.ciesin.org/pidb/texts/ITTA.1994.txt.html >, (Jun. 13, 2003).
[4] Article 3(4) of the U.N. Framework Convention on Climate Change, May 9, 1992 (entered into force Mar. 24, 1994), *reprinted in* 31 I.L.M. 849 (1992).

poverty consistent with the *objectives* of sustainable development and the gradual integration of the ACP countries into the world economy" [emphasis added].[6] The North American Agreement on Environmental Cooperation states that one of its objectives is to "*promote* sustainable development based on cooperation and mutually supportive environmental and economic policies."[7] Similarly, the ASEAN Agreement on the Conservation of Nature and Natural Resources provides that:

> "The Contracting Parties, within the framework of their respective national laws, undertake to adopt singly, or where necessary and appropriate through concerted action, the measures necessary to maintain essential ecological processes and life-support systems, to preserve genetic diversity, and to ensure the sustainable utilisation of harvested natural resources under their jurisdiction in accordance with scientific principles and with a view to attaining *the goal* of sustainable development." [8]

State practice as evidenced by international treaty therefore recognises that sustainable development is a goal of the international community. There is no obligation, under the abovementioned treaties, for States to implement "sustainable development" *per se*; rather the obligations contained within the agreements should contribute towards

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[5] Article 6 of the Treaty of Amsterdam, Oct. 7, 1997 (entered into force May 1, 1999), O.J. (C 340) 145, *reprinted in* 37 I.L.M. 56 (1997), at 173.
[6] Article 1 of the Partnership Agreement between the Members of African, Caribbean and Pacific Group of States of the one Part and the European Community, of the other Part, Jun., 23, 2000 (entered into force Apr. 1, 2003), *reprinted at* <http://www.acpsec.org/gb/lome/cotonou1.pdf>, (visited Sep. 26, 2001).
[7] Article 1(b), North American Environment Agreement, Sep. 14, 1993 (entered into force Jan. 1, 1994), *reprinted in* 4 Y.B. Int'l Entl. L. 831 (1993).
[8] Article 1(1), ASEAN Agreement on the Conservation of Nature and Natural Resources, Jul. 9, 1985 (entered into force May 30, 1999), *reprinted at* <http://www.oceanlaw.net/texts/asean.htm>, (visited Jun. 12, 2003).

achieving the goal of sustainable development. While therefore not recognising any normative content to the goal of sustainable development, these treaties do illustrate international law's important role in contributing towards sustainable development.

3.2 Non-binding Instruments

The approach to sustainable development found in treaties is supported by numerous non-binding instruments which recognise sustainable development as a goal of the international community. For example, UN GA Res 44/228 affirmed the intention of the 1992 UN Conference on Environment and Development is to "elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of increased national and international efforts to *promote* sustainable and environmentally sound development in all countries" [emphasis added].[9] The resulting non-binding instruments of the conference, the Rio Declaration, Agenda 21 and the Forest Principles, each incorporated sustainable development as a goal of the international community.[10]

The international community's commitment to sustainable development can also be found in the outcomes of post Rio international conferences relating to economic, social

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[9] *United Nations Conference on Environment and Development*, G.A. Res. 44/228, U.N. GAOR, 44th Sess., 85th Plen. Mtg., U.N. Doc. A/RES/44228 (1989), *reprinted at* <http://www.un.org/documents/ga/res/44/ares44-228.htm>, (visited Jun. 13, 2003).

[10] *Declaration of the UN Conference on Environment and Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, in Report of the United Nations Conference on Environment and Development, Annex I, U.N. Doc. A/Conf.151/26 (Vol. I), *reprinted in* 31 I.L.M. 876 (1992); *Agenda 21: A Programme for Action for Sustainable Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development,* Annex II, U.N. Doc. A/Conf.151/26 (Vol. II) (1992); *Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests,* Rio de Janeiro, Jun. 13, 1992, *in Report of the UN Conference on Environment and Development,* UN Doc. A/Conf.151/26 (Vol. III), *reprinted in* 31 I.L.M. 882 (1992).

and environmental concerns, including the 1993 World Conference on Human Rights,[11] 1994 Conference on the Sustainable Development of Small Island Developing States,[12] the 1994 International Conference on Population and Development,[13] the 1995 World Conference on Women,[14] the 1995 World Summit on Social Development,[15] and the 2001 UN Conference on the Least Developed Countries.[16]

The international community has also confirmed its commitment to the goal of sustainable development through many ministerial statements such as the 2000 Mälmo Ministerial Declaration,[17] the 2000 Millennium Declaration,[18] the 2001 UN ECE Ministerial Statement for the World Summit on Sustainable Development,[19] and the Doha

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[11] *Vienna Declaration and Programme of Action*, World Conference on Human Rights, Vienna, Austria, June 14-25, 1993, UN Doc. A/Conf.157/23, <http://habitat.igc.org/undocs/vienna.html>, (visited Jun. 13, 2003).

[12] *Report of the Global Conference on the Sustainable Development of Small Island Developing States*, Bridgetown, Barbados, April 25 – May 6, 1994, UN Doc. A/CONF.167/9 (1994), < http://www.un.org/esa/sustdev/sids/sids.htm>, (visited Jun. 13, 2003).

[13] *Report of the International Conference on Population and Development*, Cairo, Egypt, Sept 5-13, 1994, UN Doc. A/Conf.171/13 (1994), Oct. 18, 1994, <http://www.un.org/popin/icpd2.htm>, (visited Jun. 13, 2003).

[14] *Report of the Fourth World Conference on Women*, Beijing, China, Sept 4-15, 1995, UN Doc. A/Conf. 177/20 (1995), <http://www.un.org/womenwatch/confer/beijing/reports/plateng.htm>, (visited Jun. 13, 2003).

[15] *Report of the World Summit for Social Development*, Copenhagen, Denmark, March 6-12, 1995, UN Doc. A/Conf.166/9 (1995) <http://www.un.org/esa/socdev/wssd/>, (visited Jun. 13, 2003).

[16] *Declaration of the Third UN Conference on the Least Developed Countries*, Brussels, Belgium, May 14-20, 2001, U.N. Doc. A/Conf.19/L.20 (2001), <http://www.unctad.org/conference/>, (visited Jun. 13, 2003).

[17] *Malmö Ministerial Declaration, Governing Council of UNEP, Global Ministerial Environment Forum,* 6th Spec. Sess., 5th Plen. Mtg., May 31, 2000, *reprinted at* <www.unep.org/malmo/malmo_ministerial.htm>, (visited Jun. 13, 2003).

[18] *United Nations Millennium Declaration*, G.A. Res. 55/2, U.N. GAOR, 55th Sess., 8th Plen. Mtg., Agenda Item 60(b), U.N. Doc. A/Res/55/2 (2000), *available at* <http://www.un.org/millennium/declaration/ares552e.htm>, (last visited Jun. 13, 2003)

[19] *UN/ECE Ministerial Statement for the World Summit on Sustainable Development*, UN/ECE Regional Ministerial Meeting for the World Summit on Sustainable Development, Geneva, Switzerland, Sep. 24-25, 2001, U.N. Doc. ECE/ AC.22/2001/4/Rev.1 (2001), <http://www.johannesburgsummit.org/html/prep_process/europe_northamerica/european_prepcom_final_statement.pdf>, (visited Jun. 13, 2003).

Ministerial Declaration.[20] Commitment to the goal of sustainable development was further reaffirmed by the international community's decision to hold the 2002 World Summit on Sustainable Development in order to "reinvigorate the global commitment to sustainable development"[21] and the subsequent Johannesburg Declaration and Action plan.[22]

3.3 Decisions of Courts and Tribunals

In the *Gabcikovo-Nagymaros* case the ICJ had the opportunity to comment on sustainable development.[23] The ICJ somewhat cryptically noted that:

> "Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of

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[20] *Doha Ministerial Declaration of the Fourth Ministerial Conference*, Doha, Qatar, Nov. 14, 2001, *reprinted at* <http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm>, (visited Jun. 13, 2003).

[21] *Ten-year Review of Progress Achieved in the Implementation of the Outcome of the United Nations Conference on Environment and Development*, G.A. Res 55/199, U.N. GAOR, 55th Sess., 87th Plen. mtg., Agenda Item 95(a), U.N. Doc. A/Res/55/199 (2000), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003)**.** See also *Implementing Agenda 21, Report by the Secretary-General,* U.N. Commission on Sustainable Development, 2nd Sess., U.N. Doc. A/CN.17/2002/PC.2/7 (2001), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003); *Progress in Preparatory Activities for the World Summit on Sustainable Development: Report of the Secretary-General*, 56th Sess., Agenda Item 98(a), U.N. Doc. A/56/379 (2001), <http://www.johannesburgsummit.org/html/documents/un_docs/a_56_379.pdf>, (visited Jun. 13, 2003); *Programme for the Further Implementation of Agenda 21,* G.A. Res. S/19-2, U.N. GAOR, 19th Spec. Sess., 11th Plen. Mtg., Agenda Item 8, U.N. Doc. A/Res/S-19/2 (1997)**.**

[22] Johannesburg Declaration of the World Summit on Sustainable Development, Report of World Summit on Sustainable Development, Johannesburg, South Africa, Aug. 26 – Sep. 4, 2002, at 1, U.N. Doc. A/Conf.199/20 (2002), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003); *Plan of Implementation of the World Summit on Sustainable Development*, *Report of World Summit on Sustainable Development,* Johannesburg, South Africa, Aug. 26 – Sep. 4, 2002, at 6, U.N. Doc. A/Conf.199/20 (2002), <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003).

> the risks for mankind -- for present and future generations -- of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development."[24]

The ICJ does not directly mention whether sustainable development is a legally binding norm or not, although the express reference to sustainable development as a concept points away from its legally binding nature.

Judge Weeramantry was less reserved and in his separate opinion in the *Gabcikovo-Nagymaros* Case suggested that sustainable development was a principle of international law, "by reason not only of its inescapable necessity, but also by reason of its wide and general acceptance by the global community.'[25] Judge Weermantry may be correct in recognising that the concept of sustainable development has received wide and general acceptance within the international community. However, wide and general acceptance is not of itself enough to create a legally binding norm of international law. The term in question must also be capable of conferring rights and obligation on States, or in the words of the *North Sea Continental Fish Cases*, be of "fundamentally norm creating

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[23] Case Concerning the Gabcikovo-Nagymaros Project (Hung. v. Slovak.), 37 I.L.M. 162 (1998) (Sept. 25, 1997)
[24] *Id.* Para. 140.

character."[26] A study of the State practice in this thesis has shown that sustainable development does not meet this second condition because it is a goal rather than a legally binding norm.

Sustainable development was also discussed by the WTO Appellate Body in the *United States – Import Prohibition of Certain Shrimp and Shrimp Products Case*.[27] The Appellate body considered the significance of including the objective of sustainable development in the preamble of the 1997 Agreement establishing the WTO. The Appellate Body concluded that the effect of its inclusion was to add, "colour, texture and shading" to the interpretation of the WTO agreements.[28] Or in others, where there was a question of interpretation as to the substantive provisions, the aims and objectives of the Treaty as provided for in the Preamble, should be taken into account.

3.4 Writings of Publicists

An examination of the writings of publicists dealing with sustainable development and international law reveals a general scepticism regarding sustainable development's status as a legal norm, although a few differing approaches can be ascertained.

A number of writers would place the concept of sustainable development in the category of emerging international law. Birnie and Boyle maintain that:

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[25] Gabcikovo-Nagymaros Case, *supra* note 23., separate opinion of Judge Weeramantry, at 208.
[26] North Sea Continental Shelf Cases (FRG/Dem.; FRG/ Neth.), 1969 ICJ 3 (Feb. 20), at para. 72.

> "… few states quarrel with the proposition that development should be sustainable and that all natural resources should in principle be managed in this way. This evidence, coupled with indications of supporting state practice, might be sufficient to crystallise the *opinio juris* into a normative standard of international law, or even into a peremptory norm of international law."[29]

Birnie and Boyle later conclude that "normative uncertainty, coupled with the absence of justiciable standards for review, strongly suggest that there is *as yet* no international legal obligation that development must be sustainable, and that decisions on what constitutes sustainability rest primarily with individual governments" [emphasis added].[30]

Of the writers that consider sustainable development to be an emerging norm of international law some recognise elements of the norm to have already become legally binding. Certain procedural components of sustainable development, such as environmental impact assessments, are believed to already be part of international law.[31]

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[27] United States – Import Prohibition of Certain Shrimp Products, Report of Appellate Body, Oct. 12, 1998, WT/DS58/AB/R, at para. 153.
[28] *Id.*
[29] Birnie P. & Boyle, A.E., *International Law and the Environment* (Clarendon Press, Oxford 1992), at 123.
[30] Birnie, P. & Boyle, A.E., *International Law and the Environment* (2nd Ed., Oxford University Press, Oxford 2002), at 96.
[31] *Id.* at 17. Boyle and Freestone, write:

> "… although international law may not require development to be sustainable, it does require development decisions to be the outcome of a process which promotes sustainable development. Specifically, if states do not carry out EIAs, or encourage public participation, or integrate development and environmental considerations in their decision-making, or take account of the needs of intra- and inter-generational equity, they will have failed to implement the main elements employed by the Rio Declaration and other international instruments for the purpose of facilitating

While the last chapter has shown that to a certain extent elements of sustainable development may have been incorporated into international law, the chapter also illustrated that caution should be adopted as many lack the normative content to become binding international law.

Sands also points to elements of the concept of sustainable development being established in international law "even if its meaning and effect is uncertain."[32] He goes on to state that sustainable development "is a legal term which refers to processes, principles and objectives, as well as to a large body of international agreements on environment, economics and civil and political rights."[33] Such a definition is confusing because it is unclear what is meant by a "legal term".

After reviewing treaty law and international jurisprudence, concerning sustainable development, Schrijver concludes that sustainable development "has become an established objective of the international community and a concept *with a certain status* in international law" [emphasis added].[34] While it cannot be disputed that sustainable development has become an objective of the international community, it is misleading to describe the term as having a certain status *in* international law. Sustainable development

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sustainable development. There is, as we shall see below, ample state practice to support the normative significance of most of these elements."

[32] Sands, P., "International Law in the Field of Sustainable Development," 65 Brit. Y.B. Int'l L. 303 (1994), at 379.
[33] *Id.*
[34] Schrijver, N., "Development – the Neglected Dimension in the Evolution of the International Law of Sustainable Development," Paper Presented at International Seminar: International Law and Sustainable Development: Principle and Practice, Amsterdam, Nov. 29 – Dec. 1, 2001.

as an objective of the international community may influence the development and interpretation of international law, but it is not, in itself, a rule or principle of international law.

Uncertainty over the meaning of the concept of sustainable development is seen by some as a major impediment to its status as an international legal norm.[35] Handl, although not denying the possibility of the concept of sustainable development becoming international law, points to the fundamental definitional problem of the concept.[36] He goes on to write that,

> "… the concept suffers from internal tension: 'Sustainable development' as an international policy or legal concept, clearly implies some measure of international accountability; yet, as generally endorsed, it is also accompanied by an express disclaimer of any intended encroachment upon state sovereignty. The initial challenge,

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[35] Beyerlin, U., "The Concept of Sustainable Development," *in* Wolfrum, R., ed., *Enforcing Environmental Standards: Economic Mechanisms as Viable Means?*, 95 (Springer, Berlin 1996); Malanczuk, P., "Sustainable Development: Some Critical Thoughts in the Light of the Rio Conference," *in* Ginther, K., *et al,* eds., *Sustainable Development and Good Governance*, 23 (Martinus Nijhoff Publishers, Dodrecht 1995); Pallemaerts, M., "International Environmental Law in the Age of Sustainable Development: A critical Assessment of the UNCED Process," 15 J.L. & Com. 623 (1996); Pinto, M.C.W., "Reflections on the Term Sustainable Development and its Institutional Implications," *in* Ginther, K., *et al,* eds., *Sustainable Development and Good Governance*, 54 (Martinus Nijhoff Publishers, Dodrecht 1995); Pinto, M.C.W., "Legal Context: Concepts, principles standards and institutions," *in* Weiss, F., Denters, E. & Waart, P, de., eds., *International Economic Law with a Human Face* 13 (Kluwer Law International, London 1998); Porras, I.M., "The Rio Declaration: A New Basis for International Cooperation," *in* Sands, P., ed., *Greening International Law,* 20 (Earthscan Publications Ltd, London 1993). *See also* Redclift, M., Sustainable Development - Exploring the Contradictions (Routledge, London 1987).

[36] Handl, G., "Environmental Security and Global Change: The Challenge to International Law," 1 Y.B. Int'l Envt'l L. 3 (1990), at 25-26.

> therefore, will be to reach a clear international understanding on pathways to sustainable development and agreement on the specific markers that lead to that goal."[37]

Lowe maintains that the concept of sustainable development is "rooted in theoretical obscurity and confusion."[38] The obscurity and confusion surrounding the concept of sustainable development is not however based on the meaning of the term. There is wide consensus that sustainable development is, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In fact, this commonly accepted meaning of sustainable development is championed as a reason for its popularity, for it is acceptable to all interested parties, developed and developing countries, environmentalists and developmentalists, State and non-State actors.[39] Where the ambiguity and confusion lie is in taking this meaning of sustainable development and applying it within a particular international, regional, national or local context.

Lowe recognises that the concept sustainable development has some legal relevance:

> "There is an immense gravitational pull exerted by concepts such as sustainable development, regardless of their standing as rules or principles of *lex lata*. That is plain

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[37] *Id.* at 26. *See* Handl, G., "Sustainable Development: General Rules versus Specific Obligations," in Lang, W., ed., *Sustainable Development and International Law*, 35 (Graham&Trotman/ Martinus Nijhoff, Dordrecht 1995).

[38] Lowe, V., "Sustainable Development and Unsustainable Practices," *in* Boyle, A. & Freestone, D., eds., *International Law and Sustainable Development - Past Achievements and Future Challenges* 19 (Oxford University Press, Oxford 1999), at 23.

> when they are used by judges as modifiers; but it is also true when they are used in the same way by States as they negotiate (either with other States, or within their own governmental apparatus) on ways of reconciling conflicting principles."

Evidently there exists a large body of discussion and disagreement amongst writers as to the relation between sustainable development and international law.

Conclusion

This chapter has shown that the major body of opinion points away from sustainable developing having any normative status within international law. This chapter supports the viewpoint, as put forward in the previous chapter, that sustainable development is a goal of the international community. Recent treaties, non-binding instruments, and the decision of courts and tribunals point towards sustainable development being a goal of the international community. State practice does not recognise sustainable development as a norm, the breach of which would give rise to international legal responsibility. Writings of publicists are not so conclusive. This chapter has shown that varying opinions exist amongst writers as to the relevance of sustainable development to international law. However, it is difficult to see how sustainable development, as goal of the international community, could become a rule or principle of international law. As present, the goal of sustainable development lacks the normative content necessary to confer rights and obligations on States. This having been said, international law is not

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[39] Stone, C.D., *Should Trees Have Standing?* (Oceana Publications, New York 1996), at 101. Stone refers to the "artful vagueness" of sustainable development being the partial cause of its broad appeal.

without importance in promoting the goal of sustainable development. How international law can be used to promote the goal of sustainable development will be explored in the next chapter.

CHAPTER FOUR

"INTERNATIONAL LAW" IN THE FIELD OF SUSTAINABLE DEVELOPMENT

> "…there is now a need to consolidate and extend relevant legal principles in a new charter to guide state behaviour in the transition to sustainable development. It would provide the basis for, and be subsequently expanded into, a Convention, setting the sovereign rights and reciprocal responsibilities of all states on environmental protection and sustainable development" (WCED, *Our Common Future* 1987)[1]

The Brundtland report and Principle 27 of the Rio Declaration called for "the further development of international law in the field of sustainable development."[2] Various studies have considered the relationship between sustainable development and international law, including *inter alia*, the 1987 WCED Principles on Environmental Protection and Sustainable Development;[3] the 1995 UN CSD Principles of International Law of Sustainable Development;[4] the 2000 IUCN International Covenant on

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[1] WCED, *Our Common Future* (Oxford University Press, Oxford 1987), at 332.

[2] Declaration of the UN Conference on Environment and Development, Rio de Janeiro, Brazil, Jun. 13, 1992, in Report of the United Nations Conference on Environment and Development, Annex I, U.N. Doc. A/Conf.151/26 (Vol. I), reprinted in 31 I.L.M. 876 (1992). Principle 27 reads: "States and people shall cooperate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the future development of international law in the field of sustainable development."

[3] 1987 WCED Legal Principles on Environmental Protection and Sustainable Development, *in* Munro, R.D. & Lammers, J.G., *Environmental Protection and Sustainable Development – Legal Principles and Recommendations* (Graham & Trotman, London 1986). The legal principles were adopted by an independent committee of experts in environmental law, convened under the auspices of WCED.

[4] UN DPCSD, Report of the Expert Group Meeting on Identification of Principles of International Law for Sustainable Development, Geneva, Switzerland, Sept 26-28, 1995 <http://www.un.org/esa/sustdev/law.htm>, (visited May 8, 2002). The Expert Group was convened in by the secretariat of the UN Commission on Sustainable Development, with the objective, "to identify basic

Environment and Development;[5] and the 2002 ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development.[6] These studies all have in common the fact that they have sought to identify rules and principles relating to economic development, environmental protection and human rights, in a bid to ascertain and then further develop an international law in the field of sustainable development.

This chapter will consider the most prevalent of these rules and principles relating to sustainable development, as advocated by the studies listed above, in order to determine the current status of international law in the field of sustainable development. The study is not intended to provide an exhaustive list of all existing, emerging and proposed rules and principles relating to economic development, environmental and human rights, but instead it will consider the most prevalent rules and principles based on their status in international law and their contribution to promoting the key elements of sustainable development. The rules and principles considered are sovereignty over natural resources,

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principles and concepts of international law for sustainable development, consider possible classifications of such principles and concepts, and assess their potential practical implications in a legal context, including their role in the interpretation and application of existing international law in the field. Twenty-nine independent legal experts met.

[5] 2000 IUCN Draft Covenant on Environment and Development (2nd Ed. IUCN, Gland 2000). The IUCN Draft Covenant is the result of a long gestation period which was originally presented to the UN in 1995 on the occasion of its fiftieth anniversary, and later revised in 2000, with the hope that the covenant would be used to negotiate a global treaty on environmental conservation and sustainable development. Over 90 world renowned legal experts contributed to the draft Covenant, all in their individual capacity.

[6] 2000 *ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development,* 2002, adopted at the 70th conference of the ILA, New Delhi, India, Apr. 6, 2002, *reprinted at* <http://www.ila-hq.org/>, (visited Jun. 13, 2003). The ILA Committee was established in 1992 with the remit to identify and elucidate principles, norms and rules of international law, both existing and emerging, which would constitute, "a normative framework for sustainable development." Around 45 independent legal experts where members of the ILA Committee on Legal Aspects of Sustainable Development. *See also* Earth Charter, Jun. 29, 2000, <http://www.earthcharter.org/earthcharter/charter.htm>, (visited Jun. 13, 2003); Sands, P., "International Law in the Field of Sustainable Development", 65 Brit. Y.B. Int'l L. 303 (1994).

the sustainable use of natural resources, the precautionary approach, common but differentiated responsibility, the right to development, integration and interrelationship, and public participation. The following section will discuss the relevance and content of each of these rules and principles before looking at whether each rule and principle is or is not part of international law.

4.1 Sovereignty over Natural Resources

4.1.1 Content

The principle of sovereignty over natural resources entails a right of States to exploit their own natural resources and a duty to protect the environment. However, the precise content of the principle differs from one instrument to the other. Article 1(2) of the 2002 ILA New Delhi Declaration stipulates that:

> "It is a well-established principle that, in accordance with international law, all States have the sovereign right to manage their own natural resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause significant damage to the environment of other States or of areas beyond the limits of national jurisdiction." [7]

Under the 2000 IUCN International Covenant a more extensive obligation is envisaged: "to protect and preserve the environment within the limits of their national jurisdiction." [8]

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[7] *Id.*
[8] IUCN Covenant, *supra* note 5, Article 11(1) of 2000 IUCN International Covenant:

The 1995 UN CSD Principles also place States under a more onerous obligation to, "conserve and utilise their wealth and resources for the well-being of their peoples." [9]

4.1.2 Legal status

A number of international agreements refer to the sovereignty over natural resources principle. Article 3 of the 1992 Biodiversity Convention, for example, stipulates that:

> "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." [10]

> "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to utilise their resources to meet their environmental and sustainable development needs, and the obligations:
>
> (a) to protect and preserve the environment within the limits of their national jurisdiction; and
>
> (b) to ensure that activities within their jurisdiction or control do not cause potential or actual harm to the environment of other States or of areas beyond the limits of national jurisdiction."

[9] 1995 UN CSD Principles, *supra note* 4, para. 51, provides:

> "It is a well-established practice, accepted as law, that within the limits stipulated by international law every State is free to manage and utilise the natural resources within its jurisdiction and to formulate and pursue its own environmental and development policies. However, States have to conserve and utilise their wealth and resources for the well-being of their peoples, as provided in the Declaration on Permanent Sovereignty over Natural Resources and common Article 1 of the Human Rights Covenants, and they have the responsibility not to cause damage to the environment of other States or to areas beyond national jurisdiction."

[10] U.N. Convention on Biological Diversity, Jun. 5, 1992 (entered into force Dec. 29, 1992), *reprinted in* 31 I.L.M. 822 (1992). *See also* Preamble of the U.N. Framework Convention on Climate Change, May 9, 1992 (entered into force Mar. 24, 1994), *reprinted in* 31 I.L.M. 849 (1992) ; Article 4(6) of the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, Nov. 24, 1983 (entered into force Aug. 22, 1990), *reprinted at* <http://www.greenyearbook.org/agree/mar-env/sprep.htm>, (visited Jun. 30, 2003); Preamble to the Convention on Long-range Transboundary Air Pollution, Nov. 13,

The principle can also be found in numerous non-binding instruments, such as the 1972 Stockholm Declaration,[11] the 1992 Rio Declaration,[12] and others.[13] The ICJ in its *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons* commented that, "the existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment."[14] While there is therefore strong evidence to support the principle being part of customary international law, the extent of the right and correlative obligation must be considered in greater detail.

1979 (entered into force Mar. 16, 1983), *reprinted at* < http://www.unece.org/env/lrtap/>, (visited Jun. 12, 2003); Preamble to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, Dec. 29, 1972 (entered into force Aug. 30, 1975), *reprinted at* <http://sedac.ciesin.org/pidb/texts/marine.pollution.dumping.of.wastes.1972.html>, (visited Jun. 12, 2003); Preamble to the Convention for the Protection of the Ozone Layer, Mar. 22, 1985 (entered into force Sep. 22, 1988), *reprinted in* 26 I.L.M. 1529 (1987); Preamble to the Convention on the Transboundary Effects of Industrial Accidents, Mar. 17, 1992 (entered into force Apr. 19, 2000), *reprinted at* <http://www.unece.org/env/teia/text.htm>, (visited Jun. 12, 2003); Article 18 of the Energy Charter Treaty, Dec. 17, 1994 (entered into force Apr. 16, 1998), *reprinted in* 34 I.L.M. 360 (1995); Article IV of the Treaty for Amazonian Co-operation, July 3, 1978 (entered into force Feb. 2, 1980), *reprinted in* 17 I.L.M. 1045 (1978) ; Article 1 of the International Tropical Timber Agreement, Jan. 26, 1994 (entered into force Jan. 1, 1997), *reprinted at* < http://sedac.ciesin.org/pidb/texts/ITTA.1994.txt.html >, (Jun. 13, 2003).

[11] Principle 21 of the Declaration of the UN Conference on the Human Environment, Jun. 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1416 (1972).

[12] Rio Declaration, *supra* note 2.

[13] *Charter of Economic Rights and Duties of States,* GA Res. 3281 (XXIX), U.N. GAOR, 29th Sess., Supp. (No. 31), UN Doc. A/Res/3281(XXIX) (1975), *reprinted in* 14 I.L.M. 251 (1975), Article 2(1) stipulates that, "every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities"; Principle 1(a) of the *Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests,* Rio de Janeiro, Jun. 13, 1992, *in Report of the UN Conference on Environment and Development,* UN Doc. A/Conf.151/26 (Vol. III), *reprinted in* 31 I.L.M. 882 (1992).

[14] Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226 (Jul. 8). *See also* paras. 84-88 of Texaco Award (Texaco v. Libya) (1977), *reprinted in* 17 I.L.M. 320 (1978).

A State's *right* of sovereignty over natural resources includes a right to freely dispose of its natural resources, a right to expropriation, and the right to compensation for damages to natural resources caused by third parties.[15] There is strong support for the fact that the *duty* to "respect" the environment covers both the environment of other States and areas beyond national control. What, therefore, is meant by respecting the environment? The principle appears to be founded on the Latin maxim, *sic utere ut alienum non laedas*. The ICJ, in the *Corfu Channel Case*, elaborated on the Latin *sic utere* maxim when it stated that:

> "Such obligations are based, … on certain general and well-recognized principles, namely: elementary considerations of humanity, even more exacting in peace than in war; the principle of the freedom of maritime communication; and every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States."[16]

Pursuant to the *Corfu Channel Case*, the obligation is one of not impinging on the rights of other States under international law. In the context of transboundary pollution, in the *Trail Smelter Arbitration*, the tribunal noted in *obiter dicta* that:

> "…under the principles of international law…, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of

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[15] *See* Schrijver, N., Sovereignty over Natural Resources – Balancing Rights and Duties (Cambridge Uni Press, Cambridge 1997), at 258 – 305.
[16] Corfu Channel Case (U.K. v. Alb.), 1949 I.CJ. 4 (Apr. 9), at 22.

> another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence." [17]

It would therefore seem that some level of factual harm is permitted so long as it does not, according to the *Corfu Channel Case*, run contrary to the rights of other States. The *Trail Smelter Arbitration* supports the threshold of that harm being, harm of "serious consequence".

Article 3 of the 2001 ILC Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities, provides that, "the State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimise the risk thereof."[18] The obligation contained in the draft Articles slightly differs from that discussed in the *Trail Smelter Arbitration* in that the latter introduces a threshold of "significant transboundary harm" rather than "serious consequence". The commentary to the 2001 ILC Draft Articles explains that:

> "It is to be understood that "significant" is something more than "detectable" but need not be at the level of "serious" or "substantial". The harm must lead to a real detrimental effect on matters such as, for example, human health, industry, property, environment or

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[17] Trail Smelter Arbitration (US v. Can.), 3 R.I.A.A. 1905 (1941), at 1965.
[18] Commentaries to *Draft Articles on Prevention of transboundary harm from hazardous activities*, *in Report of the International Law Commission on the Work of its Fifty-third Session,* U.N. GAOR, Supp. (No. 10), U.N. Doc. A/56/10, *reprinted at* <http://www.un.org/law/ilc/reports/2001/2001report.htm>, (visited Jun. 13, 2003).

> agriculture in other States. Such detrimental effects must be susceptible of being measured by factual and objective standards." [19]

Article 3 of the 2001 ILC Draft Articles also places States under an obligation of conduct rather than result. The obligation in Article 3 is not to "prevent significant transboundary harm" *per se*, but is an obligation to "take all appropriate measures to prevent significant transboundary harm." What constitutes "all appropriate measures" places States under a "due diligence" obligation to prevent significant transboundary harm. In the *Alabama Case*, "due diligence" was defined as, "a diligence proportioned to the magnitude or the subject and to the dignity and strength of the power which is exercising it."[20] The Special Rapporteur on State Responsibility, García-Amador, wrote in this First Report, that due diligence involved:

> "…due care in taking measures normally undertaken in the particular circumstances of the case, foreseeability of the injurious acts and the possibility of preventing their commission with the resources available in the State, necessary exercise of authority in apprehending the individuals who committed injurious acts and giving the alien the opportunity to bring a claim against such individuals." [21]

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[19] *Id.*
[20] The Geneva Arbitration (The Alabama Case) *reported in* Moore, J.B., *History and Digest of the International Arbitrations to which the United States has been a Party*, vol. 1 (1898), especially pp. 572-573.
[21] García-Amador, F.V., Report of the Special Rapporteur on State Responsibility, Y.B. ILC (vol. II), A/3159 (A/11/9) 1956, UN Doc. A/CN.4/96.

More recently, the Special Rapporteur on International Liability for Injurious Consequences noted the key elements of due diligence as being:

> "The degree of care in question is that expected of a good Government. In other words, the Government concerned should possess, on a permanent basis, a legal system and material resources sufficient to ensure the fulfilment of its international obligations. To that end, the State must also establish and maintain an adequate administrative apparatus. However, it is understood that the degree of care expected of a State with well-developed economic, human and material resources and with highly evolved systems and structures of governance is not the same as for States which are not in such a position."[22]

The duty of due diligence within the transboundary context therefore contains two elements. Firstly, there is an international minimum standard required of all States to meet their international obligations. States will owe a higher duty of care for activities involving hazardous substances than for other pollutants.[23] States must also establish and enforce sufficient legal, administrative and technical measures for that State to fulfill its obligations to other States.[24] Secondly, above the minimum standard of care required, the obligation on States may differ depending on the potential for harm, and the economic, human and material resources available to the State. Due diligence therefore

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[22] Rao, S.P., Second Report of the Special Rapporteur on International Liability for Injurious Consequences arising out of Acts not Prohibited by International Law, Y.B. ILC, A/54/10, 1999, UN Doc. A/CN.4/501, at para. 31.
[23] Lammers, J.G., *Pollution of International Watercourses – A Search for Substantive Rules and Principles of Law* (Martinus Nijhoff Publishers, Boston 1984), at 350 - 351.
[24] McCaffrey, S.C., *Fourth Report on the Law of the Non-Navigational Uses of International Watercourses* [1988] 2(2) YB Int'l L. Comm'n, Pt. 1, 205, UN Doc. A/CN.4/412 and Add 1 and 2, at 239; *see also* Commentary to the 2001 ILC Draft Articles, *supra* note 17, at 391.

appears to provide for differentiated standards of care for developed and developing States, tied directly to their particular circumstances.

There is also support for the obligation that States should "respect" the environment beyond their national jurisdiction. Article 193 of the 1982 UN Convention on the Law of the Sea provides that: "States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment."[25] The environment of the Antarctic and Outer Space is also protected through a series of treaties.[26]

Widespread and general support therefore exists for a principle of international law that affords States the sovereign right to exploit their natural resources, while imposing at the same time a duty on States to take appropriate measures to respect the environment of other States and of areas beyond their jurisdiction. Is there also an existing or emerging obligation as advocated by the 2000 IUCN International Covenant, "to protect and preserve the environment within the limits of a States own national jurisdiction,"

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[25] U.N. Convention on the Law of the Sea, Dec. 10, 1982 (entered into force Nov. 16, 1994), *reprinted in* 21 I.L.M. 1261 (1982).

[26] *See* Antarctic Treaty, Dec. 1., 1959 (entered into force Jun. 23, 1961), 402 U.N.T.S. 5778; Agreement Measures for the Conservation of Antarctic Fauna and Flora, Jun. 2, 1964 (entered into force Nov. 1, 1982), *reprinted at* <http://sedac.ciesin.columbia.edu:9080/entri/texts/acrc/aff64.txt.html>, (visited Jun. 12, 2003); Convention on the Conservation of Antarctic Seals, Jun. 1, 1972 (entered into force Mar. 11, 1978), *reprinted at* <http://sedac.ciesin.columbia.edu:9080/entri/texts/antarctic.seals.1972.html>, (visited Jun. 12, 2003); Convention on the Regulation of Antarctic Mineral Resource Activities, Jun. 2, 1988 (not yet in force), *reprinted at* <http://sedac.ciesin.org/pidb/texts/acrc/cramra.txt.html>, (visited Jun. 13, 2003); Protocol on Environmental Protection to the Antarctic Treaty, Jun., 23, 1991 (entered into force Jan 14, 1998), *reprinted in* 30 I.L.M. 1461 (1991); Treaty on Principles Governing the Activities of States in Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967 (entered into force Oct. 10, 1967), 610 U.N.T.S. 205 (1967).

regardless of legal injury to other States;[27] or, as maintained by the 1995 UN CSD Principles, an obligation on States to "conserve and utilize their wealth and resources for the well-being of their peoples"?[28] This will be considered below within the context of the sustainable use of natural resources.

4.2 Sustainable Use of Natural Resources

4.2.1 Content

The sustainable use of natural resources is a key component to promoting the sustainable development in that it seeks to protect the natural resources base and supporting ecosystems from overexploitation, thus providing the basis for socio-economic development. The 1995 UN CSD Principles provide that, "the principle of sustainable use of natural resources requires States and peoples to pay due care to the environment and to make rational use of the natural wealth and resources of the areas within their jurisdiction."[29] The 1987 WCED Principles stipulate that, "States shall maintain ecosystems and ecological processes essential for the functioning of the biosphere, shall preserve biological diversity, and shall observe the principle of optimum sustainable yield in the use of living natural resources and ecosystems."[30] Pursuant to the 2002 ILA New Delhi Declaration:

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[27] IUCN International Covenant, *supra* note 5.
[28] UN CSD Principles, *supra* note 4.
[29] UN CSD Principles, para. 57, *supra* note 4.
[30] IUCN International Covenant, Article 3, *supra* note 5.

> "States are under a duty to manage natural resources, including natural resources within their own territory of jurisdiction, in a rational, sustainable and safe way so as to contribute to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems. States must take into account the needs of future generations in determining the rate of use of natural resources." [31]

According to these attempts to further develop international law in the field of sustainable development, there would appear to be two main elements to "sustainable use"; the rational use of natural resources and the protection of ecosystems. "Sustainable use", as articulated in the above provisions, does not require that the environment of another State or areas beyond a State's jurisdiction be affected. Instead, both the 1995 UN CSD Principles and the 2002 ILA New Delhi Declaration focus on the use of natural resources *within* a State's own jurisdiction.

4.2.2 Legal Status

The term "sustainable use" finds expression in a number of international agreements. Article 1 of the 1992 Biodiversity Convention, for instance, provides that one of the objectives of the convention is the sustainable use of components of biological diversity.[32] "Sustainable use" is defined as "the use of components of biological diversity

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[31] ILA New Delhi Declaration, Article 1(2), *supra* note 6.
[32] Biodiversity Convention, *supra* note 10. Article 1 reads:

> "The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by

in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations."[33] Article 3(c) of the 1994 Desertification Convention notes that the Parties should "work towards" the sustainable use of land and scarce water resources.[34] The provisions of the 1992 Biodiversity Convention and the 1994 Desertification Convention relating to sustainable use do not place States under an obligation to ensure the sustainable use of all natural resources but rather the Convention introduces sustainable use as an aspiration.

In the case of shared natural renewable resources, the 1982 UN Convention on the Law of the Sea (UNCLOS) obliges States to ensure the sustainable use of certain marine resources. Within the Exclusive Economic Zone States must ensure that "the maintenance of the living resources in the exclusive economic zones is not endangered by over-exploitation."[35] An obligation is placed on the States "through proper conservation and management measures …to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield."[36] Coastal States are also

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appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding."

[33] Biodiversity Convention, Article 2, *supra* note 10.

[34] Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Oct. 14, 1994 (entered into force Oct. 14, 1994), 1954 U.N.T.S. 3 (1994). Article 3(c) reads: "the Parties should develop, in a spirit of partnership, cooperation among all levels of government, communities, non-governmental organizations and landholders to establish a better understanding of the nature and value of land and scarce water resources in affected areas and to work towards their sustainable use."

[35] UNCLOS, Article 61(2), *supra* note 24.

[36] UNCLSO, *supra* note 24. Article 61(3) notes that "Maximum sustainable yield" is to be based on, "relevant environmental and economic factors, including the economic needs of coastal fishing communities and the special requirements of developing States, and taking into account fishing patterns,

obligated to "promote the objective of optimum utilization of the living resources in the exclusive economic zone."[37] In relation to the high seas, UNCLOS obliges States to "take, or to cooperate with other States in taking, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas."[38] State parties are also obliged to take measures designed "to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield."[39] Similarly, the objective of the 1995 Straddling Stocks Agreement is, "to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks."[40] States are obliged to "take measures to prevent or eliminate over-fishing and excess fishing capacity and to ensure that levels of fishing effort do not exceed those commensurate with the sustainable use of fishery resources."[41]

Under the 1992 Biodiversity Convention, "sustainable use" is defined in a way that requires natural resources to be used at a rate and in a manner that does not lead to their long-term decline. Therefore, as long as the resources are not being overexploited, "sustainable use", as articulated in the 1992 Biodiversity Convention, does not require the

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the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global."

[37] Article 62(1), *supra* note 26. In relation to highly migratory species States are also obliged, under Article 64(1) to, "cooperate directly or through appropriate international organizations with a view to ensuring conservation and promoting the objective of optimum utilization of such species throughout the region, both within and beyond the exclusive economic zone."

[38] UNCLOS, Article 117, *supra* note 24.

[39] UNCLOS, Article 119(1)(a), *supra* note 24.

[40] Article 2 of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, Aug. 3, 1995 (entered into force Dec. 11, 2001), *reprinted at* <www.un.org/Depts/los/convention_agreements/ convention_overview_fish_stocks.htm>, (visited Jun. 13, 2003).

[41] Article 5(h), *id*.

resources be used efficiently or that the maximum possible benefit be derived from their use. The concepts of "maximum sustainable yield" and "optimal utilization" are more onerous than "sustainable use" because they do require that the maximum possible benefit be derived from the use of natural resources.

The treaties relating to the marine environment support a sustainable use obligation for activities relating to shared renewable resources. Is there also a general obligation on States "to pay due care to the environment and to make rational use of the natural wealth and resources of the areas within their jurisdiction"?[42] Support for this proposition is largely based on the idea of that natural resources can no longer be considered solely within the domestic jurisdiction of a State, due to their importance to the international community as a whole and must therefore be protected accordingly as a common concern.[43]

Certain treaties do indeed seek to regulate the natural wealth and resources of the areas within a State's jurisdiction - the most notable examples being the 1971 Ramsar Convention,[44] the 1972 World Heritage Convention,[45] the 1973 CITES Convention,[46] the 1992 Biodiversity,[47] the 1992 Climate Change Convention[48] and the 1994 Desertification

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[42] Para 57 of UNSCD Principles, *supra* note 4.
[43] Commentary to the IUCN Draft Covenant, *supra* note 5, at 34.
[44] Convention on Wetlands of International Importance especially as Waterfowl Habitat, Feb. 2, 1971 (entered into force Dec. 21, 1975), 996 U.N.T.S. 245 .
[45] Convention on the Protection of the World Cultural and Natural Heritage, Nov. 16, 1972, (entered into force Jul. 1, 1975), 993 U.N.T.S. 243 .
[46] Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973 (entered into force Jul. 1, 1975), 993 U.N.T.S. 243 (1973) .
[47] Biodiversity Convention, *supra* note 10.

Convention.[49] Do these conventions support the concept of sustainable use as being a norm of international law?

Closer consideration of this treaty law suggests that they do not. Under the 1971 Ramsar Convention, States have the discretion to decide which wetlands will be subject to the provisions of the Convention,[50] and the inclusion of a wetland in the list, "does not prejudice the exclusive sovereign rights of the Contracting Party in whose territory the wetland is situated."[51] Article 3(1) provides that "the Contracting Parties shall formulate and implement their planning *so as to promote* the conservation of the wetlands included in the List, and *as far as possible* the wise use of wetlands in their territory" [emphasis added].

Similarly, while one of the objectives of the 1992 Biodiversity Convention is sustainable use, the Convention does not oblige parties to *ensure* the sustainable use of components of biological diversity. Rather the parties shall "as far as possible" adopt certain measures for the sustainable use of the components of biological diversity.[52] Under Article 4(d) of the 1992 Climate Change Convention States must "*promote* sustainable management, and *promote* and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the

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[48] Climate Change Convention, *supra* note 10.
[49] Desertification Convention, *supra* note 33.
[50] Ramsar Convention, Article 2(1) and (2), *supra* note 43. It should however be noted that there are 136 contracting parties to the convention and 1284 wetlands sites, totalling 108.9 million hectares have been included under the Ramsar Convention Regime, *see* <http://www.ramsar.org/>, (visited Jun. 18, 2003).
[51] Ramsar Convention, Article 2 (4), *supra* note 43.

Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems" [emphasis added].[53] Again, promoting sustainable management, conservation and enhancement appears to fall short of obliging States to formally implement "sustainable use". The 1994 Convention to Combat Desertification adopts the same approach and provides that "Parties *should* develop, in a spirit of partnership, cooperation among all levels of government, communities, non-governmental organizations and landholders to establish a better understanding of the nature and value of land and scarce water resources in affective areas and to *work towards* their sustainable use" [emphasis added].[54] In addition, the Parties "shall…*promote cooperation* among affected country Parties in the fields of environmental protection and the conservation of land and water resources, as they relate to desertification and drought" [emphasis added].[55]

The 1972 World Natural and Cultural Heritage Convention and the 1973 CITES, impose the most restrictive provisions on States regarding their use of certain flora and fauna. While, under the 1972 World Natural and Cultural Heritage Convention it is left up to the States to designate properties situated on its territory of "cultural or natural heritage."[56] For designated properties States are obliged "to ensure the identification, protection,

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[52] Biodiversity Convention, Article 5, *supra* note 10.
[53] Climate Change Covention, *supra* note 10.
[54] Desertification Convention, Article 3(c), *supra* note 33.
[55] Desertification Convention, Article 4(1)(d), *supra* note 33.
[56] World Natural and Cultural Heritage Convention, Articles 2 and 3, *supra* note 44.

conservation, presentation and transmission to future generations of the cultural and natural heritage".[57]

The Preamble to the 1973 CITES recognises "that international cooperation is essential for the protection of certain species of wild fauna and flora against overexploitation through international trade."[58] Endangered species of wild fauna and flora in the territory of the contracting parties are subject to the trade restriction pursuant to the provision of CITES in order to prevent their overexploitation.[59]

There is therefore evidence to support the fact that States are reluctant to agree to legally binding obligations relating to the use and protection of the environment lying solely within their national territory, so long as States respect the environment of other States or areas beyond their jurisdiction.

4.3 The Precautionary Approach

4.3.1 Content

The precautionary approach is an important means of protecting natural resources and supporting ecosystems in that it seeks to prevent irreversible harm. Article 4 of the ILA New Delhi Declaration stipulates that, "a precautionary approach is central to sustainable development in that it commits States, international organisations and the civil society, particularly the scientific and business communities, to avoid human activity which may

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[57] World Natural and Cultural Heritage Convention, Article 4, *supra* note 44.
[58] CITES, *supra* note 45.
[59] CITES, Article III – V, *supra* note 45.

cause significant harm to human health, natural resources or ecosystems, including in the light of scientific uncertainty."[60] Article 7 of the IUCN International Covenant provides that "lack of scientific certainty is no reason to postpone action to avoid potentially serious or irreversible harm to the environment."[61]

4.3.2 Legal Status

A precautionary approach is noted as the basis behind the formulation of a number of international treaties, including the 1992 Climate Change Convention,[62] the 2000 Cartagena Protocol on Biosafety,[63] the 1985 Convention on the Protection of the Ozone Layer,[64] and the 2001 Stockholm Convention on Persistent Organic Pollutants.[65]

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[60] ILA New Delhi Declaration, *supra* note 6.
[61] IUCN International Covenant, *supra* note 5.
[62] Climate Change Convention, *supra* note 10.
[63] Protocol on Biosafety, Jan., 29, 2000 (not yet in force), *reprinted in* 39 I.L.M. 1027 (2000). Article 1 reads:

> "In accordance with the precautionary approach … the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements."

[64] Convention for the Protection of the Ozone Layer, *supra* note 10. The preamble reads: "Aware of the potentially harmful impact on human health and the environment through modification of the ozone layer." Montreal Protocol on Substances that Deplete the Ozone Layer, Sep. 16, 1987 (entered into force Jan. 1, 1989), 1522 U.N.T.S. 3 (1987). The preamble reads:

> "Mindful of their obligation under that Convention to take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer, Recognizing that world-wide emissions of certain substances can significantly deplete and otherwise modify the ozone layer in a manner that is likely to result in adverse effects on human health and the environment."

[65] Convention on Persistent Organic Pollutants, May 22, 2001, (not yet in force), *reprinted in* 40 I.L.M. 532 (2001). Article 1 reads: "Mindful of the precautionary approach as set forth in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Convention is to protect human health and the environment from persistent organic pollutants."

A further set of treaties make reference to the precautionary approach, including the 1994 Energy Charter Treaty,[66] the 1998 Protocol on Persistent Organic Pollutants,[67] the 1992 Biodiversity Convention[68] and the 1992 UN ECE Watercourses Convention.[69]

Some treaties expressly oblige States to apply the precautionary approach. At the regional level the Treaty on European Union stipulates, *inter alia*, that community policy on the environment "shall be based on the precautionary principle."[70] In relation to transboundary natural resources, Article 6(1) of the 1995 Straddling Stocks Agreement provides that, "States shall apply the precautionary approach widely to conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks in order to protect the living marine resources and preserve the marine environment."[71] Moreover, the 1992 Convention on the Protection of the Marine Environment of the North East Atlantic, obliges States to apply,

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[66] Energy Charter Treaty, *supra* note 10. Article 19(1) reads: "In its policies and actions each Contracting Party shall strive to take precautionary measures to prevent or minimise environmental degradation."

[67] Protocol on Persistent Organic Pollutants, Jun. 24, 1998 (not yet in force), *reprinted in* 37 I.L.M. 1 (1998). The preamble reads: "Resolved to take measures to anticipate, prevent or minimize emissions of persistent organic pollutants, taking into account the application of the precautionary approach, as set forth in principle 15 of the Rio Declaration on Environment and Development."

[68] Biodiversity Convention, *supra* note 10. The Preamble notes that, "where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat."

[69] Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Mar. 17, 1992 (entered into force Oct. 6, 1996), *reprinted in* 31 I.L.M. 1312 (1992). Article 2(5) reads: "In taking the measures referred to in paragraphs 1 and 2 of this article, the Parties shall be guided by the following principles: … The precautionary principle, by virtue of which action to avoid the potential transboundary impact of the release of hazardous substances shall not be postponed on the ground that scientific research has not fully proved a causal link between those substances, on the one hand, and the potential transboundary impact, on the other hand."

[70] Article 139(r)(2) of the Treaty of Amsterdam, Oct. 7, 1997 (entered into force May 1, 1999), O.J. (C 340) 145, *reprinted in* 37 I.L.M. 56 (1997).

[71] Straddling Stocks Agreement, *supra* note 39.

> "the precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects."[72]

Similarly, the 1995 Convention for the Protection of the Marine Environment of the Mediterranean Sea stipulates that:

> "In order to protect the environment and contribute to the sustainable development of the Mediterranean Sea Area, the Contracting Parties shall … apply, in accordance with their capabilities, the precautionary principle, by virtue of which where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[73]

With regard to non-binding instruments, Principle 15 of the Rio Declaration provides that "where there are threats of serious or irreversible damage, lack of full scientific certainty

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[72] Article 2(2)(a), Convention for the Protection of the Marine Environment of the North East Atlantic, Sep. 22, 1992 (entered into force Mar. 25, 1998), *reprinted in* 32 I.L.M. 1069 (1993).

[73] Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, Jun. 10, 1995 (not yet in force), *reprinted at* <http://www.unep.ch/seas/main/hconlist.html>, (visited Jun. 13, 2003). *See also* Convention on the Protection of the Marine Environment of the Baltic Sea Area, Apr. 9, 1992 (entered into force Jan. 17, 2000), *reprinted at* <http://fletcher.tufts.edu/multi/texts/22los.txt>, (visited Jun. 12, 2003). Article 3(2) "The Contracting Parties shall apply the precautionary principle, i.e., to take preventive measures when there is reason to assume that substances or energy introduced, directly or indirectly, into the marine environment may create hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea even when there is no conclusive evidence of a causal relationship between inputs and their alleged effects."

shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[74] The 1982 World Charter for Nature states that:

> "Activities which might have an impact on nature shall be controlled, and the best available technologies that minimise significant risks to nature or other adverse effects shall be used, in particular:
>
> (a) Activities which are likely to cause irreversible damage to nature shall be avoided;
>
> (b) Activities which are likely to pose a significant risk to nature shall be preceded by an exhaustive examination; their proponents shall demonstrate that expected benefits outweigh potential damage to nature, and where potential adverse effects are not fully understood, the activities should not proceed." [75]

The 1990 Bergen ECE Ministerial Declaration on Sustainable Development urges that:

> "In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation."[76]

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[74] Rio Declaration, *supra* note 2.
[75] *World Charter for Nature*, G.A. Res. 37/7, U.N. GAOR, 37th Sess., 48th Plen. mtg., U.N. Doc. A/Res/37/7 (1982), *reprinted in* 22 I.L.M. 455 (1983).
[76] Hohman, H., ed., *Basic Documents of International Environmental* Law, (Graham and Trotman, London 1992), at 558-559.

The ICJ had opportunity to comment on the precautionary principle in the 1995 *Nuclear Tests Case*.[77] The precautionary principles was said to be, "a principle which is gaining increasing support as part of the international law of the environment."[78]

In the 1998 WTO *Beef Hormone Case*, the EC maintained that the precautionary principle had become part of customary international law, the Arbitration Panel in *obiter dicta*, noted that:

> "The status of the precautionary principle in international law continues to be subject to debate among academics, law practitioners, regulators and judges. The precautionary principle is regarded by some as having crystallized into a general principle of customary international *environmental* law. Whether it has been widely accepted by Members as a principle of *general* or *customary international law* appears less than clear." [79]

It can be argued that the precautionary approach is a logical extension of the obligation on States to take appropriate measures to protect the environment of other States or of areas beyond the limits of national jurisdiction. The ILC's 2001 Draft Articles on Prevention on Transboundary Harm, for example, provide that there is an obligation to

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[77] Request for an examination of the situation in accordance with paragraph 63 of the Court's judgement of 20 December 1974 in the Nuclear Tests (New Zealand v. France) Case, 1995 I.C.J. 288 (Sep. 22).
[78] *Id.* at 342.
[79] EC Measures Concerning Meat and Meat Products (Hormones), Jan. 16, 1998, WT/DS26/AB/R, <www.wto.org>, (visited Jun. 13, 2003), at para. 123.

take appropriate measures to minimise the "risk" of significant transboundary harm.[80] The ILC commentary to the Articles goes on to state that "risk of causing significant harm", refers "to the combined effect of the probability of occurrence of an accident and the magnitude of its injurious impact."[81] The ILC commentary thus recognises that the greater the risk, the greater the need for a precaution. The treaties relating to the marine environment also support precautionary approach in relation to shared natural resources. However, there is little support for the claim that States are under an international obligation to apply the precautionary approach for *all* activities, including national activities "which may cause significant harm to human health, natural resources or ecosystems, including in the light of scientific uncertainty."[82]

4.4 Common but Differentiated Responsibility

4.4.1 Content

The notion of common but differentiated responsibility supports the position that in order to promote sustainable development there is a need to account for the differing capabilities of States.

The 2002 ILA New Delhi Declaration identifies two elements of common but differentiated responsibility. Firstly, "the special needs and interests of developing countries and of countries with economies in transition, with particular regard to least

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[80] 2001 ILC Draft Articles, *supra* note 17.
[81] 2001 ILC Draft Articles, *supra* note 17, at 387.
[82] ILA New Delhi Declaration, *supra* note 6.

developed countries and those affected adversely by environmental, social and developmental considerations, should be recognised."[83] Secondly, "developed countries bear a special burden of responsibility in reducing and eliminating unsustainable patterns of production and consumption and in contributing to capacity-building in developing countries, *inter alia* by providing financial assistance and access to environmentally sound technology. In particular, developed countries should play a leading role and assume primary responsibility in matters of relevance to sustainable development."[84] The 1987 WCED Principles also provide that, "States shall … provide assistance to other States, especially to developing countries, in support of environmental protection and sustainable development."[85]

4.4.2 Legal Status

This thesis previously maintained that States, pursuant to international law, are under an obligation to respect the environment of other States and of areas beyond the limits of national jurisdiction. Are differentiated responsibilities to protect the environment also recognised under international law?

The preamble to the 1992 Climate Change Convention acknowledges "that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance

[83] ILA New Delhi Declaration, Principle 3.1, *supra* note 6.
[84] ILA New Delhi Declaration , Principle 3.4, *supra* note 6.
[85] WCED Principles, Article 7, *supra* note 3.

with their common but differentiated responsibilities and respective capabilities and their social and economic conditions."[86] The parties are also to be guided by the following principles:

> "(1) The Parties *should* protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.
>
> (2) The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, *should* be given full consideration" [emphasis added]. [87]

The notion of differentiated responsibilities has been applied in various ways.[88] Principle 23 of the 1972 Stockholm Declaration notes that, "it will be essential in all cases to

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[86] Climate Change Convention, *supra* note 10. *See also* Article 10 of the Protocol to the UN Framework Convention on Climate Change, Dec. 11, 1997 (not yet in force), *reprinted in* 37 I.L.M. 22 (1998).
[87] Climate Change Convention, Article 3, *supra* note 10.
[88] *See* Article 5 of 1987 Montreal Protocol on Protection of the Ozone Layer, *supra* note 63:

> "(1) Any Party that is a developing country and whose annual calculated level of consumption of the controlled substances is less than 0.3 kilograms per capita on the date of the entry into force of the Protocol for it, or any time thereafter within ten years of the date of entry into force of the Protocol shall, in order to meet its basic domestic needs, be entitled to delay its compliance with the control measures set out in paragraphs 1 to 4 of Article 2 by ten years after that specified in those paragraphs. However, such Party shall not exceed an annual

consider the systems of values prevailing in each country, and the extent of applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for developing countries."[89] Accordingly, under the 1997 Kyoto Protocol on Climate Change differing commitments to reduce greenhouse gas emissions were agreed to.[90] Differing compliance time schedules may also be justified on the basis of common but differentiated responsibility, as in the case of the 1996 Protocol to the London Dumping Convention.[91]

The transfer of technical and financial assistance is also recognized in multilateral treaties. Transfer of technology is envisaged under the 1992 Biodiversity Convention: "access to and transfer of technology to developing countries shall be provided and/or facilitated under fair and most favourable terms, including on concessional and preferential terms."[92] The 1992 Biodiversity Convention stipulates that "the developed country Parties shall provide new and additional financial resources to enable developing

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calculated level of consumption of 0.3 kilograms per capita. Any such Party shall be entitled to use either the average of its annual calculated level of consumption for the period 1995 to 1997 inclusive or a calculated level of consumption of 0.3 kilograms per capita, whichever is the lower, as the basis for its compliance with the control measures.

(2) The Parties undertake to facilitate access to environmentally safe alternative substances and technology for Parties that are developing countries and assist them to make expeditious use of such alternatives.

(3) The Parties undertake to facilitate bilaterally or multilaterally the provision of subsidies, aid, credits, guarantees or insurance programmes to Parties that are developing countries for the use of alternative technology and for substitute products."

[89] 1972 Stockholm Declaration, *supra* note 11.
[90] *See* Annex B of Kyoto Protocol, *supra* note 85.
[91] Protocol to the London Dumping Convention, Nov. 7, 1996 (not yet in force), *reprinted in* 36 I.L.M. 7 (1997).
[92] Biodiversity Convention, Article 16(2), *supra* note 10.

country Parties to meet the agreed full incremental costs to them of implementing measures which fulfil the obligations of this Convention and to benefit from its provisions."[93] The 1992 Biodiversity Convention also notes that the special needs of the developing countries must be taken into account.[94]

Similarly, the 1994 Desertification Convention provides that "the Parties *should* take into full consideration the special needs and circumstances of affected developing country Parties, particularly the least developed among them" [emphasis added].[95] Accordingly, technical and financial assistance is provided for:

> "The parties undertake, as mutually agreed and in accordance with their respective national legislation and/or policies, *to promote*, finance and/ or facilitate the financing or the transfer and acquisition, adaptation and development of environmentally sound, economically viable and socially acceptable technologies relevant to combating

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[93] Biodiversity Convention, Article 20(2), *supra* note 10.

[94] Biodiversity Convention, Article 20, *supra* note 10, stipulates, *inter alia*, that:

> "(5) The Parties shall take full account of the specific needs and special situation of least developed countries in their actions with regard to funding and transfer of technology.
>
> (6) The Contracting Parties shall also take into consideration the special conditions resulting from the dependence on, distribution and location of, biological diversity within developing country Parties, in particular small island States.
>
> (7) Consideration shall also be given to the special situation of developing countries, including those that are most environmentally vulnerable, such as those with arid and semi-arid zones, coastal and mountainous areas."

[95] Desertification Convention, Article 3(d), *supra* note 33.

desertification and/or mitigating the effects of drought, with a view to contributing to the achievement of sustainable development in affected areas" [emphasis added]. [96]

The 1995 Straddling Stocks Agreement calls for cooperation within developing countries to meet the objectives of the Agreement.[97] Coooperation is to include "the provision of financial assistance, assistance relating to human resources development, technical assistance, transfer of technology, including through joint venture arrangements, and advisory and consultative services."[98]

Financial assistance to developing countries for the protection of the environment is provided for through the Global Environment Facility (GEF) established in 1990, and restructured in 1994 in light of the Climate Change Convention and Biodiversity Convention.[99] The purpose of GEF is to provide new and additional funding to meet

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[96] Desertification Convention, Article 18(1), *supra* note 33. Article 6 reads:

"In addition to their general obligations pursuant to article 4, developed country Parties undertake to:

(a) actively support, as agreed, individually or jointly, the efforts of affected developing country Parties, particularly those in Africa, and the least developed countries, to combat desertification and mitigate the effects of drought;
(b) provide substantial financial resources and other forms of support to assist affected developing country Parties, particularly those in Africa, effectively to develop and implement their own long-term plans and strategies to combat desertification and mitigate the effects of drought;
(c) promote the mobilization of new and additional funding pursuant to article 20, paragraph 2 (b);
(d) encourage the mobilization of funding from the private sector and other non-governmental sources; and
(e) promote and facilitate access by affected country Parties, particularly affected developing country Parties, to appropriate technology, knowledge and know-how."

[97] Strddling Stocks Agreement, Article 25, *supra* note 39.
[98] Straddling Stocks Agreement, Article 25(2), *supra* note 39.
[99] Instrument for the Establishment of the Restructured GEF (1994), *reprinted at* <http://gefweb.org/Documents/Instrument/ Instrument.html>, (visited Jun. 18, 2003). *See also* Article 15 –

incremental costs of measures that seek to bring global environment benefits in four key areas, climate change, biological diversity, pollution of international waters, and the depletion of the ozone layer.[100] The World Bank acts as trustee for GEF, while UNDP and UNEP, act as implementing agencies.[101]

While there is therefore State practice in support for the transfer of finance and technology it is doubtful whether States consider themselves under a legal obligation to provide such assistance. Most of the provisions contained in treaty provisions point away from a legal obligation being imposed on States to adopt differentiated responsibilities. The principle of common but differentiated responsibilities was controversially included in the 1992 Rio Declaration. Principle 7 noted that:

> "States shall co-operate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, states have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and the technologies and financial resources they command." [102]

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18 of the Convention for the Protection of the World Cultural and Natural Heritage, *supra* note 44, establishing the World Heritage Fund; and the UNEP Environment Fund, established pursuant to UN GA Res. 2997 (XXVII) (1972).

[100] *Id.*

[101] Instrument for the Establishment of the Restructured GEF, *supra* note 98. *See* Handl, G., "The Legal Mandate of Multilateral Development Banks as Agents for Change Toward Sustainable Development", 92 Am. J. Int'l L. 642 (1998).

[102] Rio Declaration, *supra* note 2.

The developed countries refused to accept that Principle 7 of the Rio Declaration implied any legal responsibility.[103] The United States included the following interpretative statement: "The United States does not accept any interpretation of Principle 7 that would imply a recognition or acceptance by the United States of any international obligations or liabilities, or any diminution in the responsibilities of developing countries."[104]

A WTO Panel established to resolve a dispute between US and Malaysia over the prohibition on the import of certain shrimp and shrimp products, came to a similar conclusion. In citing Principle 7 of the Rio Declaration, the WTO Panel urged:

> "Malaysia and the United States to cooperate fully in order to conclude as soon a possible an agreement which will permit the protection and conservation of sea turtles to the satisfaction of all interests involved and *taking into account* the principle that States have common but differentiated responsibilities to conserve and protect the environment" [emphasis added]. [105]

There is however scope for arguing that the principle of differentiated responsibility is partly contained in the right of sovereignty over natural resources, in that States are under

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[103] *See* Kovar, J.D., "A Short Guide to the Rio Declaration," 4 Colo. J. Int'l Entl. L. & Pol'y 119 (1993), at 129.

[104] Report of the United Nations Conference on Environment and Development, United Nations Conference on Environment and Development, U.N. Doc. A/CONF. 151/26 (vol. IV) (1992), at 20-22.

a due diligence obligation to "take all appropriate measures" to protect the environment of other States and areas beyond their jurisdiction. What is "appropriate" for a developed country may not be "appropriate" for a developing country. The notion of differing environmental standards may therefore already be part of international law in relation to respecting the environment of other States and areas beyond a State's jurisdiction. There is however scant support in favour of an obligation under international law on States to provide technical and financial assistance or change unsustainable patterns of consumption and production (consistent with the duty to protect the environment of other States or areas beyond a State's jurisdiction).

4.5 Right to Development

4.5.1 Content

The right to development, inclusive of the eradication of poverty, is important to the promotion of sustainable development in that it focuses on the constant improvement in the well-being of individuals. The 2000 IUCN Covenant notes that "the exercise of the right to development entails the obligation to meet the developmental and environmental needs of humanity in a sustainable and equitable manner."[106] The 2002 ILA New Delhi Declaration provides that the "right to development" includes "the duty to cooperate for the eradication of poverty … as well as the duty to co-operate for global sustainable development and the attainment of equity in the development opportunities of developed

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[105] United States – Import Prohibition of Certain Shrimp and Shrimp Products, June 15, 2001, WT/DS58/RW, <http://www.wto.org>, (visited Jun. 13, 2003), para. 7.2.
[106] IUCN International Covenant, Article 8, *supra* note 5.

and developing countries."[107] The 1995 UN CSD Principles stipulate that "the right to development related to the basic right of every human person to life as well as the right to develop his/her potential so as to live in dignity. Similarly, it related to the right of peoples to existence and to develop themselves."[108]

4.5.2 Legal status

The legal status of the right to development remains ambiguous at best.[109] Some writers have described the right as an important principle of current international law,[110] while others point towards it being emerging international law. The 1995 UN CSD Principles allege that "some governments have opposed the existence of a right of development as a human right or principle of international law, while others considered it as of primordial importance. However, in recent years this divergence of opinion seems to be diminishing."[111] The commentary to the 2000 IUCN International Covenant most cautiously states that, "although international consensus has not yet crystallised over the

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[107] ILA New Delhi Declaration, Article 2(3), *supra* note 6.
[108] UN CSD Principles, Para. 20, *supra* note 4.
[109] *See,* Paul, J.C.N., "The United Nations and the Creation of an International Law of Development," 36 Harv. Int'l L.J. 307 (1995); Bilder, R. & Tamanaha, B.Z., "The Lessons of Law-and-Development Studies," 89 Am. J. Int'l L. 470 (1995); Kiwanuka, R., "Developing Rights: The UN Declaration on the Right to Development," 35 Neth. Int'l L. Rev. 257 (1988); Snyder, F., & Slinn, P., eds., *International Law of Development: Comparative Perspectives* (Professional Books Ltd., Abingdon 1987); Waart, P. de., *et al*, eds., *International Law and Development* (Martinus Nijhoff Publishers, Dordrecht 1988); Bunn, I.D., "The Right to Development: Implications for International Economic Law," 15 Am. U. Int'l L. Rev. 1425 (2000).
[110] Singh, N., "Sustainable Development as a Principle of International Law", *in* Waart, P., de., *et al.,* eds., *International Law and Development* 1 (Martinus Nijhoff Publishers, Dordrecht 1988); Declaration on the Progressive Development of Principles of Public International Law Relating to a New International Economic Order, adopted at 62nd Conference of the International Law Association, Seoul, 1986, *reprinted in* Waart, P. de., *et al.,* eds., International Law and Development, 410 (Nijhoff Publishers, Dordrecht 1988)
[111] UN CSD Principles, *supra* note 4.

precise content of the right to development, the Draft Covenant reflects the view that full consensus *may* emerge over time" [emphasis added].[112]

There is no widespread and general acceptance of the right to development as a legal obligation in the practice of States. The right to development is not contained in any universal treaty, although elements of the right may be found in the UN Charter,[113] the 1948 Universal Declaration on Human Rights[114] and the 1966 International Covenants on Human Rights.[115] The UN General Assembly Resolution 41/128, entitled "Declaration on the Right to Development", is the clearest articulation of the right to development

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[112] IUCN International Covenant, s*upra* note 5.

[113] U.N. Charter, Jun. 29, 1945 (entered into force Oct. 24, 1945), 1 U.N.T.S. xvi. The preamble of the UN Charter includes the objective, "to promote social progress and better standards of life." Article 1(3) provides that one of the purpose of the UN is "to achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion", and Article 55(a) provides that the United Nations shall promote, "higher standards of living, full employment, and conditions of economic and social progress and development."

[114] *Universal Declaration of Human Rights*, G.A. Res. 217A(III), U.N. GAOR, U.N. Doc. A/810 (1948), *reprinted at* <https://www1.umn.edu/humanrts/instree/b1udhr.htm>, (visited Jun. 30, 2003). Article 25(1) provides that, "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."

[115] International Covenant on Civil and Political Rights, Dec. 19, 1966 (entered into force Mar. 23, 1976), *reprinted in* 6 I.L.M. 368 (1967); International Covenant on Economic, Social and Cultural Rights, Dec. 19, 1966 (entered into force Jan. 3, 1976), *reprinted in* 6 I.L.M. 360 (1967). At a regional level, Article 22 of the African Charter on Human Rights and People's Rights, Jan. 19, 1981 (entered into force Oct. 21, 1986), *reprinted in* 21 I.L.M. 58 (1982) also notes that:

> "(1) All peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind.
>
> (2) States shall have the duty, individually or collectively, to ensure the exercise of the right to development."

although it did not receive universal State support.[116] Three other non-binding instruments also mention a right to development; the 1993 Vienna Declaration and Programme of Action on Human Rights,[117] the UN GA Millennium Declaration[118] and the 1992 Rio Declaration.[119]

More important than the lack of recognition of the so-called right to development in any universal binding agreement is the fact that the right to development is not of a fundamentally norm creating character. The 1986 UN Declaration on the Right to Development describes development as "a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire

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[116] *Declaration on the Right to Development*, G.A. Res. 41/128, U.N. GAOR, 41st Sess., 97th plen. mtg., U.N. Doc. A/Res/41/128 (1986), *in* Raushcing, D., *et al., Key Resolutions of the United Nations General Assembly 1946-1996*, 241 (Cambridge University Press, Cambridge 1997).

[117] *Vienna Declaration and Programme of Action*, World Conference on Human Rights, Vienna, Austria, June 14-25, 1993, UN Doc. A/Conf.157/23, <http://habitat.igc.org/undocs/vienna.html>, (visited Jun. 13, 2003), Para. 10 reads: "The World Conference on Human Rights reaffirms the right to development, as established in the Declaration on the Right to Development, as a universal and inalienable right and an integral part of fundamental human rights."

[118] *United Nations Millennium Declaration*, G.A. Res. 55/2, U.N. GAOR, 55th Sess., 8th Plen. Mtg., Agenda Item 60(b), U.N. Doc. A/Res/55/2 (2000), *available at* <http://www.un.org/millennium/declaration/ares552e.htm>, (last visited Jun. 13, 2003). The Declaration commits the international community, "to making the right to development a reality for everyone and to freeing the entire human race from want."

[119] Rio *Declaration, supra* note 2. Principle 3 reads: "The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations." The United States added the following interpretative statement to Principle 3:

> "The United States does not, by joining consensus on the Rio Declaration, change its long-standing opposition to the so-called "right to development." Development is not a right. On the contrary, development is a goal we all hold, which depends for its realization in large part on the promotion and protection of the human rights set out in the Universal Declaration of Human Rights.
>
> The United States understands and accepts the thrust of Principle 3 to be that economic development goals and objectives must be pursued in such a way that the development and environmental needs of present and future generations are taken into account. The United States cannot agree to, and would disassociate itself from, any interpretation of Principle 3 that accepts a "right to development," or otherwise goes beyond that understanding."

population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom."[120] Article 1(1) of the 1986 UN Right to Development provides that, "the right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be realised."[121] While various aspects of the so-called right to development may be part of international law, such as the right of non-discrimination,[122] it is difficult to see how the right to development can itself be said to be a legally binding rule which confers obligations on States. Development as described in the Declaration itself, reflects a common goal of the international community rather than a legal entitlement, the denial of which would lead to a breach of an international obligation.

A reluctance of States to accept the right to development as binding under international law can be seen in the failure to encompass the right in a binding agreement, and by the fact that under the 1986 UN Declaration on the Right to Development "soft" language is used to refer to State obligations.[123] The lack of normative content can be seen in Article 10 of the 1986 UN Declaration on the Right of Development which notes that, "*steps*

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[120] Declaration on the Right to Development, Preamble, *supra* note 115.
[121] Declaration on the Right to Development, *supra* note 115.
[122] Declaration on the Right to Development, Article 8(1), *supra* note 115, provides that States, "shall ensure equality for all in the access to basic resources, education, health services, food, housing, employment and the fair distribution of income."
[123] *See* Declaration on the Right to Development, Article 6(3), supra note 1115, "States *should take steps* to eliminate obstacles to development resulting from failure to observe civil and political rights, as well as economic, social and cultural rights" [emphasis added].

should be taken to ensure the full exercise and progressive enhancement of the right to development" [emphasis added]. This Article illustrates that the right to development is an aspiration rather than something requiring immediate effect and that States are not obliged to take steps, but rather *should* take steps towards its attainment.

A key component of the right to development advocated by the 2000 IUCN International Covenant for example, is the eradication of poverty. Article 9 of the 2000 IUCN International Covenant provides that "the eradication of poverty, which in particular necessitates a global partnership, is an indispensable requirement of sustainable development."[124] Similarly, under Principle 5 of the 1992 Rio Declaration "all States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world."[125] Agenda 21 describes eradication of poverty as "the shared responsibility of all countries."[126] Furthermore, pursuant to the Report of the Social Summit and the Millennium Declaration, States commit themselves "to the goal of eradicating poverty in the world,

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[124] IUCN International Covenant, *supra* note 5.

[125] Rio Declaration, *supra* note 2. *See also* Principle 4 of the Stockholm Declaration, *supra* note 11; Principle 7(a) of the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, *supra* note 13; Principle 1 of the *Declaration of the Third UN Conference on the Least Developed Countries*, Brussels, Belgium, May 14-20, 2001, U.N. Doc. A/Conf.19/L.20 (2001), <http://www.unctad.org/conference/>, (visited Jun. 13, 2003).

[126] *Agenda 21: A Programme for Action for Sustainable Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development,* Annex II, U.N. Doc. A/Conf.151/26 (Vol. II) (1992) , para. 3.1.

through decisive national actions and international cooperation."[127] The eradication of poverty is also recognised as a priority of the developing countries in a number of international conventions, including the 1992 Climate Change Convention,[128] the 1992 Biodiversity Convention[129] and the 1994 Desertification Convention.[130] However, consistent with the legal status of the "right to development", the eradication of poverty is a goal of the international community rather than an international obligation.

Closely linked to the right to development is the right to a healthy environment. The 1987 WCED Principles notes that "all human beings have the fundamental right to an environment adequate for their health and well-being."[131]

As with the right to development, a general basis for the right to a healthy environment can be found in the UN Charter, the Universal Declaration of Human Rights, and the 1966 International Covenants.[132] There is scant recognition of the right to a healthy environment in binding agreements. The right to a healthy and adequate environment is not explicitly contained in any international convention, although it is recognised at a

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[127] Para. 11 of Millennium Declaration, *supra* note 125; Commitment 2 of the *Report of the World Summit for Social Development*, Copenhagen, Denmark, March 6-12, 1995, UN Doc. A/Conf.166/9 (1995) <http://www.un.org/esa/socdev/wssd/>, (visited Jun. 13, 2003).
[128] Climate Change Convention, Preamble and *Article* 4(7)*, supra* note 10.
[129] Biodiversity Convention, Preamble and Article 20(4), *supra* note 10.
[130] Desertification Convention, Preamble, Article 2(c) and Article 20(7), *supra* note 33.
[131] WCED Principles, s*upra* note 3.
[132] Article 3 of the Universal Declaration of Human Rights, *supra* note 113, provides a right of life and security of the human person, and Article 25(2) provides a right to an adequate standard of living to ensure health and well-being. Similarly, Article 6(1) of the Civil and Political Rights Covenant refers to the right to human life, and Article 11 refers to the right to improvement of living conditions, while Article 12(b) the Economic, Social and Cultural Covenant, refers to all aspects of environmental and industrial hygiene as it relates to the right to health (*supra* note 113).

regional level within the 1998 UN/ECE Aarhus Convention,[133] the 1981 African Charter on Human and People's Rights,[134] and the 1988 Protocol to the American Convention on Human Rights.[135] At the national level, more than seventy State constitutions recognise a right to a healthy environment.[136]

The right to a healthy environment is also contained in several non-binding instruments. The 1972 Stockholm Declaration signifies the first attempt to link human rights and the environment. Rather than proclaiming a fundamental human right to a healthy environment the Stockholm Declaration stipulates that an environment of insufficient quality may violate certain established human rights.[137] The 1989 Hague Declaration provides that, "all individuals are entitled to live in an environment adequate for their

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[133] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Jun. 25, 1998 (entered into force Oct. 30, 2001), *reprinted in* 38 I.L.M. 517 (1999). Article 1 reads:

> "In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention."

[134] Article 24 notes: "All peoples shall have the right to a general satisfactory environment favourable to their development" (*supra* note 114).

[135] Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, Nov. 14, 1988 (entered into force Nov. 16, 1999), *reprinted in* 28 I.L.M. 161, at 165. Article 11 stipulates that: "(1) Everyone shall have the right to live in a healthy environment and to have access to basic public services; (2) The State Parties shall promote the protection, preservation and improvement of the environment."

[136] Shelton, D., "Human Rights, Environmental Rights, and the Right to Environment," 28 Stan. J. Int'l L. 103 (1991), at 106.

[137] Stockholm Declaration, *supra* note 11. Principle 1 of the Declaration states that human beings have, "the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations."; *See* Giorgetta, S., "The Right to a Healthy Environment: Integral Element of Human Rights Protection," Paper presented at Seminar International Law and Sustainable Development: Principle and Practice, Amsterdam, Nov. 29 – Dec. 1, 2001.

health and well-being."[138] The 1992 Rio Declaration also alluded to a right to a healthy environment in Principle 1 when it noted that "human beings … are entitled to a healthy and productive life in harmony with nature."[139]

While there is therefore widespread recognition of the right to a healthy environment the lack of widespread acceptance by States in binding international agreements is evidence that the right is an aspiration rather than a binding obligation.[140]

4.6 The Principle of Integration and Interrelationship

4.6.1 Content

The 1995 UN CSD Principles notes that, "the principle of interrelationship and integration forms the backbone of sustainable development."[141] The 2002 ILA New Delhi Declaration notes that, "the principle of integration reflects the interdependence of social, economic, financial, environmental and human rights aspects of principles and rules of international law relating to sustainable development as well as the interdependence of the needs of current and future generations of human kind."[142]

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[138] Hague Declaration on the Environment, March 11, 1989, *reprinted in* 28 I.L.M. 1308 (1989).
[139] Rio Declaration, *supra* note 2.
[140] The existence of a right to a healthy environment under international law has sparked considerable academic debate, *see* McClymonds, J.T., "The Human Right to a Healthy Environment: An International Legal Perspective," 37 N.Y.L. Sch. L. Rev. 583, 633 (1992); Hodkova, I., "Is There a Right to a Healthy Environment in the International Legal Order?," 7 Conn. J. Int'l L. 65, 79- 80 (1991) Gormley, W.P., "The Legal Obligation of the International Community to Guarantee a Pure and Decent Environment: The Expansion of Human Rights Norms," 3 Geo. Int'l Envtl. L. Rev. 85, 85 (1990); Shelton, *supra* note 140; Nickel, J.W., "The Human Right to a Safe Environment: Philosophical Perspectives on Its Scope and Justification," 18 Yale J. Int'l L. 281, 282 (1993); Downs, J.A., "A Healthy and Ecologically Balanced Environment: An Argument for a Third Generation Right," 3 Duke J. Comp. & Int'l L. 351 (1993); Boyle, A.E. & Anderson, M.R., eds., *Human Rights Approaches to Environmental Protection*, (Oxford University Press, Oxford 1998)
[141] UN CSD Principles, Para. 15, *supra* note 4.
[142] ILA New Delhi Declaration, *supra* note 6.

The principle of integration and interdependence forms the basis on which procedural mechanisms promoting sustainable development have emerged. The 2000 IUCN International Covenant provides that, "Parties shall ensure that environmental conservation is treated as an integral part of the planning and implementation of activities at all stages and at all levels, giving full and equal consideration to environmental, economic, social and cultural factors."[143] Similarly, Article 7 of the 1987 WCED Principles stipulate that:

> "States shall ensure that the conservation of natural resources and the environment is treated as an integral part of the planning and implementation of development activities. Particular attention shall be paid to environmental problems arising in developing countries and to the need to incorporate environmental considerations in all development assistance programmes".[144]

4.6.2 Legal status

The purpose of this section is to consider whether there is an obligation on States to ensure that environmental considerations are treated as an integral part of the planning and implementation of development activities.

A number of treaties recognise the need for integration. The 1994 Desertification Convention provides a general obligation that "the Parties shall … adopt an integrated

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[143] IUCN International Covenant, Article 13(2), *supra* note 5.
[144] WCED Principles, *supra* note 3.

approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought."[145] In the same way, the 2000 EU/ACP Cotonou Agreement provides that the objective of the treaty "shall be tackled through an integrated approach taking account at the same time of the political, economic, social, cultural and environmental aspects of development".[146]

In connection with the integration of environmental considerations into planning and implementation of development activities, the 1992 Climate Change Convention provides that the parties "shall be guided" by the principle that "policies and measures to protect the climate system against human-induced change … *should* be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change" [emphasis added].[147] Integration is recognised in the 1992 Biodiversity Convention in that "each Contracting Party shall, in accordance with its particular conditions and capabilities … integrate, *as far as possible* and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and polices" [emphasis added].[148]

A stricter condition can be found at the regional level in the EU Treaty, which stipulates that "environmental protection requirements must be integrated into the definition and

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[145] Desertification Convention, Article 4(2)(a), *supra* note 33.
[146] Partnership Agreement between the Members of African, Caribbean and Pacific Group of States of the one Part and the European Community, of the other Part, Jun., 23, 2000 (entered into force Apr. 1, 2003), *reprinted at* <http://www.acpsec.org/gb/lome/cotonou1.pdf>, (visited Sep. 26, 2001).
[147] Climate Change Convention, Article 3(4), *supra* note 10.
[148] Biodiversity Convention, Article 6, *supra* note 10.

implementation of the Community policies and activities … in particular with a view to promoting sustainable development."[149] Also, the 1968 African Conservation Convention provides that "the Contracting States shall ensure that conservation and management of natural resources are treated as an integral part of national and/or regional development plans."[150] The 1985 ASEAN Agreement states that "conservation and management of natural resources are treated as an integral part of development planning at all stages and all levels."[151]

Various non-binding instruments also recognise the need to integrate environment and development. Principle 13 of the 1972 Stockholm Declaration called on States to adopt "an integrated and co-ordinated approach to their development planning so as to ensure that their development is compatible with the need to protect and improve the human environment."[152] Principle 3(c) of the Forest Principles notes that "all aspects of environmental protection and social and economic development as they relate to forests and forest lands should be integrated and comprehensive."[153] Likewise, Principle 7 of the World Charter for Nature provides that "in the planning and implementation of social and economic development activities, due account shall be taken of the fact that the conservation of nature is an integral part of those activities."[154]

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[149] EU Treaty, Article 6, *supra* note 69.
[150] Article XIV(1) of the African Convention on the Conservation of Nature and Natural Resources, Sep. 15, 1968 (entered into force Jun. 16, 1959), 1001 U.N.T.S. 3.
[151] Article 2(1) of ASEAN Agreement on the Conservation of Nature and Natural Resources, Jul. 9, 1985 (entered into force May 30, 1999), *reprinted at* <http://www.oceanlaw.net/texts/asean.htm>, (visited Jun. 12, 2003).
[152] Stockholm Declaration, *supra* note 11.
[153] Forest Principles, *supra* note 13.
[154] World Charter for Nature, *supra* note 74.

4.6.2.1 Integrating international trade and environmental protection

A key area where integration of environmental concerns must be integrated into development policies is international trade. Trade liberalisation is vital to the goal of sustainable development because it can lead to increased economic growth. However, if environmental costs are not properly accounted for, increased trade will have a negative effect on the environment.[155] Attempts to integrate environmental, economic and social issues relating to trade do exist.[156] The 1975 Convention on International Trade in Endangered Species regulates the import and export of certain species and provides sanctions for illicit trade of the species covered by the Convention.[157] The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer contains provisions that ban the import of controlled substances from any State that is a non party to the protocol.[158] What is more, the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal regulates the import and export of certain waste both between parties, and between parties and non-parties.[159]

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[155] Panayotou, T., "Globalization and Environment," paper presented at International Eminent Persons Meeting for World Summit for Sustainable Development, Sept. 3-4, 2001, UN University Centre, Tokyo, Japan, at 2.

[156] Konrad, M. Von., "International Environmental Management, Trade Regimes and Sustainability," *reprinted at* <http://iisd1.iisd.ca/trade/default.htm>, (visited Sept. 30, 2001).

[157] CITIES, *supra* note 45.

[158] Article 4 of the Montreal Protocol , *supra* note 63.

[159] Convention on Transboundary Movements of Hazardous Wastes and their Disposal, Mar. 22, 1989, 1973 U.N.T.S. 57 (entered into force May 5, 1992). See also the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Sep. 10, 1998 (not yet in force), *reprinted at* <http://www.pic.int//>, (visited Sept. 30, 2001); and Protocol on Biosaftey, Jan. 29, 2000 (not yet in force), *reprinted in* 39 I.L.M. 1027 (2000).

Despite these references to trade within environmental regimes the international trade regime has struggled to integrate environmental and social issues. International law relating to trade traditionally made little reference to the protection of the environment. Although GATT entered into force in 1947 it was not until 1971 that the GATT Council established a Group on Environmental Measures and it took another twenty years before it met.[160] 1991 was also the year when the GATT dispute settlement panel was faced with the Tuna-Dolphin case between the US and Mexico.[161] The dispute arose over a US law restricting the import of tuna to that which had been caught in compliance with "dolphin friendly" methods. In its defence the US claimed that the law restricting certain tuna imports was exempt from the rules of GATT pursuant to Article XX(b) and (g). Article XX stipulated that:

> "Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: …
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> b. necessary to protect human, animal or plant life or health; …

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[160] General Agreement on Trades and Tariffs, Oct. 30, 1947, *reprinted at* < http://www.wto.org/english/docs_e/legal_e/gatt47_01_e.htm>, (Jun. 12, 2003).
[161] United States - Restrictions on Imports of Tuna, Report of the Panel, DS21/R, Aug., 16, 1991, *reprinted in* 30 I.L.M. 1594 (1991).

> g. relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption."[162]

The GATT panel adopted a restrictive interpretation of Article XX(b) and (g) by defining the applicable measures as exceptions only if they addressed issues within the jurisdiction of the US.[163] Measures which were adopted in the interest of the non-domestic environment, would therefore not apply. The decision seems to throw into question, not only unilateral measures that restricted trade, but also international measures prohibiting the trade of certain goods between parties and non-parties to the agreement, such as the Basel Convention or the Montreal Protocol.

Further questions over the integration of trade and the environment arose when liberalisation received a major endorsement with the establishment of the WTO in 1995. The WTO, ratified by 142 members, signified a major step forward for international economic cooperation.[164] Pursuant to the preamble of the 1995 WTO Agreement States recognise:

> "…that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the

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[162] *Id.*
[163] *Id.* para 5.31.
[164] Charnovitz, S., "The World Trade Organisation and the Environment," 6 Y.B. Int'l Envt'l L. 98 (1998).

> world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development."[165]

The significance of the preamble and the outcome of the Tuna-Dolphin dispute arose in 1998 when the WTO Appellate Body was faced with a claim from India, Malaysia, Pakistan and Thailand against the US.[166] The claimants maintained that a US law banning the import of shrimp caught by "turtle unfriendly" methods contravened WTO rules. As opposed to the Tuna-Dolphin case the Appellate Body found that the US legislation was consistent with Article XX(g) even though the law sought to regulate activities beyond national territory.[167] In reaching its decision the Appellate Body was influenced by the Preamble to the WTO, which added "colour, texture and shading" to the interpretation of the 1994 WTO Agreement.[168] The commitment to promoting sustainable development through the 1994 WTO Agreement was reiterated recently by the 2001 Doha Ministerial Declaration.[169] In recent years there would thus appear to be a

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[165] Agreement Establishing the WTO, Apr. 15, 1994 (entered into force Jan. 1, 1995), *reprinted in* 22 I.L.M. 1144 (1994).

[166] United States – Import Prohibition of Certain Shrimp Products, Oct. 12, 1998, WT/DS58/AB/R, <http://www.wto.org>, (visited Jun. 13, 2003).

[167] The Appellate Body, did however, find that the US law constituted 'arbitrary and unjustifiable discrimination' under the Article XX 'chapeau' because the US had not provided the four Asian countries with the opportunity to settle the matter through international cooperation (*id.*).

[168] *Supra* note 165, at para. 153. The preamble may be important when interpreting the substantive provisions of the treaty, and may therefore influence the development of international law.

[169] *Doha Ministerial Declaration of the Fourth Ministerial Conference*, Doha, Qatar, Nov. 14, 2001, *reprinted at* <http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm>, (visited Jun. 13, 2003).

greater recognition of the need to integrate environmental concerns into international trade.

4.6.2.2 Environmental impact assessment

Environmental impact assessments are a fundamental mechanism for integrating environmental concerns in the planning and implementation of development polices. Environmental impact assessment should facilitate informed decision making on whether to proceed with a proposed action or to modify a proposal in order to eliminate or mitigate adverse environmental effects.[170] Principle 17 of the 1992 Rio Declaration provides that "environmental impact assessments, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority."[171]

Environmental impact assessment as a tool for assessing environmental consequences enjoy widespread acceptance. Over 100 countries are believed to include environmental impact assessments as part of their national legislation.[172] The United States is credited as the first country to adopt environmental impact assessment as part of their national legislation in the guise of section 102 of the National Environmental Protection Act in

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[170] Wirth, D.A., 'The Rio Declaration on Environment and Development: Two Steps Forward and One Back, or Vice Versa?', 29 Ga. L. Rev. 599 (1995), at 629.
[171] Rio Declaration, *supra* note 2. While the Stockholm Declaration, *supra* note 13, does not explicitly refer to environmental impact assessments, Principle 14 refers to "Rational planning" as being "an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment."
[172] UN CSD, *supra* note 4.

1970.[173] The EC also provided for harmonised procedures for environmental impact assessments through the 1985 Council Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment.[174]

Various treaties have included an obligation to carry out environmental impact assessments as part of the requirement to respect the environment of other States and areas beyond their jurisdiction.[175] Within the EU context, the 1985 EIA Directive was significantly amended in 1997 to elaborate on the procedure for assessment of transboundary impacts.[176] The preamble of the 1997 EIA Directive noted that it is "desirable to strengthen the provisions concerning EIA in a transboundary context to take

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[173] *See* Siegal, C.D., Rule Formation in Non-Hierarchical Systems, 16 Temp. Envtl. L. & Tech. J. 173 (1998).

[174] Council Directive 85/337 of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment, 1985 O.J. (L 175) 40. *See* Tabb, W.M., "Environmental Impact Assessment in the European Community: Shaping International Norms," 3 Tul. L. Review 92373 (1999); McHugh, P.D., "The European Community Directive - An Alternative Environmental Impact Assessment Procedure?," 34 Nat. Resources J. 589 (1994).

[175] *See* Protocol on Environmental Protection to the Antarctic Treaty, *supra* note 25; Art. 14(1), Art. 19(2)(C) and Art. 20 3(a) of the ASEAN Agreement on the Conservation of Nature and Natural Resources, supra note 150; Art. 13 of the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, June 21, 1985 (entered into force May 30, 1996), *reprinted at <http://www.greenyearbook.org/agree/mar-env/eastaf.htm>,* (visited Jun. 30, 2003); Art. 1of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Mar. 24, 1983 (entered into force Oct. 11, 1986), *reprinted at* <http://www.cep.unep.org/pubs/legislation/cartxt.html>, (visited Jan. 30, 2003); Article 206 of UNCLOS, *supra* note 24; Article XI(1) of the Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, Feb. 14, 1982 (entered into force Aug. 20, 1985), *reprinted at* <http://www.fletcher.tufts.edu/multi/texts/BH811.txt>, (visited Jun. 12, 2003); Convention for the Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, Mar. 23, 1981 (entered into force Aug. 5, 1984), *reprinted in* 20 I.L.M. 746 (1981).

[176] Council Directive 97/11/EC of March 1997 amending Directive 85/337/EEC on the Assessment of the Effects of Certain Public and Private Projects on the Environment, 1997 O.J. (L 073) 5.

account of developments at international level."[177] Such developments include the 1992 UN/ECE Convention on Environmental Impact Assessment.[178]

A number of non-binding agreements also provide a general obligation to carry out environmental impact assessments. Under Article 11(c) of the 1982 World Charter for "activities which may disturb nature shall be preceded by assessment of their consequences, and environmental impact studies of development projects shall be conducted sufficiently in advance, and if they are to be undertaken, such activities shall be planned carried out so as to minimise potential adverse effects." [179] Likewise, Article 16 of the WCED Principles provides that, "States planning to carry out or permit activities which may significantly affect a natural resource or the environment shall make or require an assessment of their effects before carrying out or permitting the planned activities."[180]

In relation to transboundary natural resources, the 1978 UNEP Goals and Principles recognise that "States should make environmental assessment before engaging in any activity with respect to a shared natural resource which may create a risk of significantly

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[177] *Id.*
[178] Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991 (entered into force Sept. 10, 1997), *reprinted in* 30 I.L.M. 800 (1991).
[179] World Charter for Nature, *supra* note 74.
[180] Article 16 of the WCED Principles, *supra* note 3. *See also* Recommendation on the Analysis of the Environmental Consequences of Significant Public and Private Projects, adopted Nov. 14, 1974, O.E.C.D. Doc. C(74)216; Recommendation on the Assessment of Projects with Significant Impact on the Environment, adopted May 8, 1979, O.E.C.D. Doc. C(79)116, *reprinted in* 5 Envt'l. Pol'y & L. 154 (1979).

affecting the environment of another State or States sharing that resources."[181] The ILC also noted in its 2001 Draft Articles on the Prevention of Transboundary harm that, "before taking a decision to authorise an activity (capable of causing transboundary harm), a State shall ensure that an assessment is undertaken of the risk of such activity)."[182]

There is therefore considerable evidence to support the fact that States are under an international legal obligation to conduct environmental impact assessments relating to the environment beyond their jurisdiction and of other States where their activities may cause significant harm. [183]

4.7 Public participation

4.7.1 Content

Public participation is an important means by which to promote the integration of economic, social and environmental interests. The 1995 UN CSD Principles noted that, "sustainable development cannot be achieved without the widespread adoption of good governance principles that ensure broader participation in development decisions and an

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[181] UNEP Governing Council Decision: Goals and Principles of Environmental Impact Assessment 17 June 1987, *reprinted in* 17 Envt'l Pol'y & L. 36 (1987).
[182] Article 12 of ILC 2001 Draft Articles, *supra* note 17.
[183] Di Leve, C.E., "International Environmental Law and Development," 10 Geo. Int'l Envtl. L. Rev. 501 (1998), at 522; Handl, G., "Environmental Security and Global Change: The Challenge of International Law", 1 Y.B. Int'l Envt'l L. 3 (1990). Handl noted that, "in light of recent state practice, … it will be increasingly difficult to maintain that states are not (yet) obliged under customary international law to assess potential transboundary effects".

open and transparent decision-making process."[184] Three core areas of public participation are advocated, access to information, participation in decision-making processes, and access to justice and administrative proceedings.

With regard to the right of access to information the 2002 ILA New Delhi Declaration states:

> "[Public participation] requires a right of access to appropriate, comprehensible and timely information held by governments and industrial concerns on economic and social policies regarding the sustainable use of natural resources and the protection of the environment, without imposing undue financial burdens upon the applicants and with due consideration for privacy and adequate protection of business confidentiality." [185]

The 2000 IUCN International Covenant provides that,

> "All persons, without being required to provide an interest, have the right to seek, receive, and disseminate information in respect to the environment, subject only to such restrictions as may be provided by law and are necessary for respect for the rights of others, for the protection of national security or for the protection of the environment." [186]

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[184] UN CSD, *supra* note 4.
[185] ILA New Delhi Declaration, Article 5(2), *supra* note 6.
[186] IUCN International Covenant, Article 12(3), *supra* note 5.

The 2000 IUCN International Covenant further notes that, "all concerned persons have the right to participate effectively during decision-making processes at the local, national and international levels regarding activities, measures, plans, programs and policies that may have a significant effect on the environment." [187]

With regard to access to justice and administrative proceedings, the 2000 IUCN International Covenant remarks that, "all persons have a right of effective access to administrative and judicial procedures, including for redress and remedies, to enforce their rights in respect to the environment, under national and international law." Access to justice and administrative proceedings is also mentioned in the 2001 ILA New Delhi Declaration:

> "The empowerment of peoples in the context of sustainable development requires access to effective judicial or administrative procedures in the State where the measure has been taken to challenge such measures and to claim compensation. States should ensure that where transboundary harm has been, or is likely to be, caused, individuals and peoples affected have non-discriminatory access to the same judicial and administrative procedures as would individuals and peoples of the States to which the harm is caused."[188]

Whether States are under an international legal obligation to ensure that the three key elements of public participation are complied with will be considered below.

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[187] IUCN International Covenant, Article 12(4), *supra* note 5.

4.7.2 Legal status

4.7.2.1 Access to information

Public participation is provided for at the regional level in the 1998 UN ECE Aarhus Convention.[189] The public is defined under the convention as "one or more natural and legal persons, and, in accordance with national legislation or practice, their associations, organizations or groups."[190] "Environmental information" is defined in the Convention as any information in written, visual, aural, electronic or any other material form on: the state of elements of the environment; factors affecting or likely to affect the elements of the environment; and the state of human health and safety, conditions of human life, cultural sites and built structures, in as much as they may be affected by the elements of the environment or factor affecting the elements.[191] Information may be refused if the request is manifestly unreasonable or formulated in too general a manner, it refers to draft documents, access may adversely affect the confidentiality of proceedings of public authorities, or the information involves matters of international relations, national defence or public security.[192] Article 4(3) provides that the restrictions be interpreted in a restrictive manner and if a request is refused then a reason for refusal must be given.[193] Furthermore, Article 9 of the Convention gives any person who considers that his or her request for information under the Convention has been ignored, wrongfully refused, or otherwise not dealt with, access to a review procedure before a court of law or another

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[188] ILA New Delhi Declaration, *supra* note 6.
[189] Aarhus Convention, *supra* note 132.
[190] Aarhus Convention, Article 2(4), *supra* note 132.
[191] Aarhus Convention, Article 2(3), *supra* note 132.
[192] Aarhus Convention, Article 4(3), *supra* note 132.
[193] Aarhus Convention, Article 4(7), *supra* note 132.

independent and impartial body established by law.[194] The information is generally to be made available within a month of a request but certain types of information may be restricted.[195]

A right of access to information also finds support in a number of human rights conventions[196] and other international agreements.[197] Under Article 6 of the 1992 Climate Change Convention, "the Parties shall … promote and facilitate at the national and, as appropriate, subregional and regional levels, and in accordance with national laws and regulations, and within their respective capacities … Public access to information on climate change and its effects."[198] While these treaties do not place States under a strict obligation to ensure that individuals have a right of access to environmental information, the Convention for the Protection of the Marine Environment of the North East Atlantic is a notable exception:

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[194] Aarhus Convention, *supra* note 132.
[195] Aarhus Convention, Article 4(3), *supra* note 132.
[196] Article 19 of the Universal Declaration of Human Rights, *supra* note 113; Article 19 of the Covenant on Civil and Political Rights, *supra* note 114; Article 10 of the European Convention on Human Rights, Nov. 4, 1950 (entered into force Sep. 3, 1953), *reprinted at* <http://conventions.coe.int/>, (visited Jun. 30, 2003); Article 9 of the African Charter on Human Rights, *supra* note 156; European Council Directive on Freedom of Access to Environmental Information, Council Directive 90/313 (7 June 1990), OJ L 158, June, 23, 1990, at 56.
[197] North American Environment Agreement, Sep. 14, 1993 (entered into force Jan. 1), 1994), *reprinted in* 4 Y.B. Int'l Entl. L. 831 (1993). Article 5(a) provides that: "The Council shall promote and, as appropriate, develop recommendations regarding … public access to information concerning the environment that is held by public authorities of each Party; including information on hazardous materials and activities in its communities, and opportunity to participate in decision-making processes related to such public access"; Article 3(8) of the Convention on Environmental Impact Assessment in a Transboundary Context, *supra* note 177.
[198] Article 6 of the Climate Change Convention, *supra* note 11.

> "The Contracting Parties shall ensure that their competent authorities are required to make available the information … to any natural or legal person, in response to any reasonable request, without that person's having to prove an interest, without unreasonable charges, as soon as possible and at the latest within two months." [199]

A number of non-binding instruments also suggest that States should be under an obligation to provide the public with access to information.[200]

4.7.2.2 Public participation in the decision-making process

The recognition of the right of non-state actors in the negotiation, monitoring and implementation of international law relating to sustainable development is being increasingly recognised as an important tool for integrating all interested interests in the decision-making process.[201] The United Nations Commission for Sustainable Development for example, under the direction of the UN General Assembly, has designed rules of procedure for the accreditation and participation of NGO's in its deliberations.[202] Further provisions are found in the 1998 Aarhus Convention.[203] A

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[199] Convention on the Protection of the North East Atlantic, *supra* note 71.
[200] *See* Principle 16 of the World Charter for Nature, *supra* note 74, and Principle 2(c) of the Forest Principles, *supra* note 13.
[201] Sands, P. & Werksman, J., "Procedural Aspects of International Law in the Field of Sustainable Development: Citizens' Rights," *in* Ginther, K., *et al.,* eds., *Sustainable Development and Good Governance* 178 (Martinus Nijhoff Publishers, Dordrecht 1995). See Articles 6-8 Aarhus Convention, *supra* note 132.
[202] For example, the UN Commission on Sustainable Development has set up multi-stakeholder dialogue segments, with the purpose of generating action-oriented dialogue between governments and major groups on a specific economic sector. The discussions that take place during a multi-stakeholder dialogue are summarized in a Chair's Summary and the recommendations that emerge from the dialogue are presented by the Chairman to the CSD as input into the Commissions subsequent decision-making on the topic ("Multi-stakeholder Dialogue Segments", <http://www.un.org/esa/sustdev/msdialog.htm>, (visited Feb. 24, 2000))

limited role for the public, as observers, is found in 1992 Biodiversity Convention[204] and the 1992 Climate Change Convention.[205] Pursuant to the 1992 Climate Change Convention:

> "Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by the Convention, and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties as an observer, may be so admitted unless at least one-third of the Parties present object."[206]

It therefore appears that there is general support for allowing the public to participate in matters relating to sustainable development although there does not appear to be a binding obligation on States.

4.7.2.3 Access to justice and administrative proceedings

Article 9(2) of the 1998 Aarhus Convention provides that:

> "Each Party shall, within the framework of its national legislation, ensure that members of the public concerned
>
> (a) Having a sufficient interest or, alternatively,

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[203] Aarhus Convention, Articles 6-8, *supra* note 132.
[204] Biodiversity Convention, s*upra* note 10.
[205] Climate Change Convention, *supra* note 10.
[206] Climate Change Convention, Article 7(6), *supra* note 10.

(b) Maintaining impairment of a right, where the administrative procedural law of a Party requires this as a precondition,

have access to a review procedure before a court of law and/or another independent and impartial body established by law, to challenge the substantive and procedural legality of any decision, act or omission." [207]

"All persons showing sufficient interest" has been defined to cover not only national citizens in national legal and administrative bodies, but also non-nationals in national legal and administrative bodies,[208] and persons in international legal and administrative bodies.[209] The right of access of judicial and administrative proceedings is also included in the 1993 North American Environment Agreement[210] and a number of non-binding instruments.[211] However, there is insufficient support to conclude that a right to access to judicial and administrative proceedings has become part of international law.

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[207] Aarhus Convention, *supra* note 132.

[208] For instance, Article 9(3) of the 1992 Convention on the Transboundary Effects of Industrial Accidents, *supra* note 10, states that:

> "The Parties shall, in accordance with their legal systems and, if desired, on a reciprocal basis provide natural or legal persons who are being or are capable of being adversely affected by the transboundary effects of an industrial accident in the territory of a Party, with access to, and treatment in the relevant administrative and judicial proceedings, including the possibilities of starting a legal action and appealing a decision affecting their rights, equivalent to those available to persons within their own jurisdiction."

[209] *See* Shelton, D., "The Participation of Nongovernmental Organizations in International Judicial Proceedings," 8 Am. J. Int'l L. 611 (1994).

[210] North American Environmental Agreement, Article 6, *supra* note 196.

[211] Principle 14 of *Principles of Conduct in the Field of Environment for Guidance of States in Conservation and Harmonious Utility of Natural Resources Shared by Two or More States*, May 19, 1978, *reprinted in* 17 I.L.M. 1091 (1978); Recommendation on Implementation of a Regime of Equal Right of Access and Non- Discrimination in Relation to Transfrontier Pollution, adopted May 17, 1977, O.E.C.D. Doc. C (77)(28)(FINAL), *reprinted in* 16 I.L.M. 977 (1977); Recommendation on Equal Right of Access

Conclusion

A study of the most prevalent rules and principles of international law in the field of sustainable development yields some interesting preliminary observations.

The study has shown that only one of the main rules and principles can be considered as binding international law; sovereignty over natural resources. There appears to be conclusive evidence in support of the proposition that the principle of sovereignty over natural resources is binding international law, and it places States under an obligation to respect the environment of other States and areas beyond a State's national jurisdiction. There is also evidence that elements of the other rules and principles overlap with the right of permanent sovereignty rule. Such elements include adopting a precautionary approach to activities that may cause significant harm to areas beyond a State's national jurisdiction; ensuring the sustainable use of shared renewable natural resources; permitting differentiated standards for the prevention of transboundary harm; and obliging States to assess the impact of activities that may cause significant harm in areas beyond a State's national jurisdiction. Inclusion of these elements in the principle of sovereignty over natural resources is not, however, the same as stating that the rule and principles are themselves part of international law.

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in Relation to Transfrontier Pollution, adopted May 11, 1976, O.E.C.D. Doc. C(76)(55)(FINAL), reprinted in OECD and the Environment, *reprinted in* 15 I.L.M. 1218 (1976).

There is a need to recognise that it was not the task of any of the studies discussed solely to codify existing international law. For example, it was stated in the introduction to the 1995 UN CSD Principles that:

> "…the Expert Group recognised that the legal status of each of the principles it considered varies considerably; some of the principles identified are more firmly established in international law, while others are only in the process of gaining relevance in international law. The Expert Group agreed that the discussion and formulation of the principles, and their identification and listing in this Report, is without prejudice to the question of whether these are part of customary international law. The experts would like to stress that this Report is not aimed at presenting an attempt at codification."[212]

Can some of the rules and principles be justified on the basis that they represent emerging international law, or a statement of what international law should be?

The right to development and its related "rules and principles", such as the eradication of poverty and the right to a healthy environment, can not be justified on the basis that they are emerging international law, or that they represent a statement of what international law should be. For a rule or principle to be binding in international law it must be capable of conferring rights and obligations on States, the breach of which leads to international consequences. However, the right to development and its related rules and principles are incapable of conferring rights and obligations on States because they reflect

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[212] UN CSD, Para. 6, *supra* note 4.

an aspiration rather than a legal entitlement. This is not to say that international law does not have a role to play in ensuring the constant improvement in the well-being of all individuals. The principle of sovereignty over natural resources, and certain fundamental human rights, such as non-discrimination, are essential for ensuring that the constant improvement in the well-being of all individuals. Reference to the right to development as part of any present, or future, international law in the field of sustainable development is consequently misguided.

Can the other rules and principles be justified as emerging international law or as a statement of what international law should be? There has been a reluctance of States to accept many of the proposed rules and principles of international law when to do so would impinge upon their sovereign right to exploit their own natural resources pursuant to their own environmental and developmental policies. This reluctance is evident from the vague or non-binding way in which such "rules and principles" have been incorporated into the text of treaties and non-binding instruments. States are unwilling to universally accept that the precautionary principle, sustainable use, integration and public participation should be binding international obligations the breach of which would give rise to international accountability. The rule of common but differentiated responsibility is also not fully recognised by States as a legal obligation. While differentiated environmental standards are widely accepted, States do not generally consider themselves under a legal obligation to transfer financial and technological assistance. It is misleading to consider these rules and principles as emerging international law because there is little likelihood that States, the primary law-makers,

would agree that their purely national activities should be regulated at an international level. Such an approach would be contrary to the purpose of international law, as outlined in chapter two of this thesis. Should a State by able to hold another State legally accountable for failing to comply international standards relating to development and environmental protection, irrespective of any harm being caused outside that States jurisdiction? Who would enforce such standards? While this approach may be possible in a group of relatively homogenous States such as the members of the European Union, the diversity of interests and opinions between States relating to development and environmental protection would preclude such an approach at the global level.[213]

The attempts to advance international law in the field of sustainable development can also be criticised for their lack of coherence. There appears to be an overlap and inconsistency in a number of the proposed rules and principles. For example, under the 2002 ILA New Delhi Declaration, all States have the sovereign right to manage their own natural resources pursuant to their own environmental and development policies. However, the 2002 ILA New Delhi Declaration restricts this right by obliging States: to manage natural resources in a rational, sustainable and safe way, avoid wasteful use of natural resources and promote waste minimisation polices. While it is advantageous to ensure that *all* natural resources are managed in a rational, sustainable and safe way, to place States under a legal obligation to manage its natural resources *per se* is inconsistent with the principle of sovereignty over natural resources, and current State practice.

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[213] *See* chapter two, *supra* pp. 43-64, outlining the diversity of interests between States relating to sustainable development.

An overlap also occurs with some of the rules and principles proposed. For instance, the precautionary approach is implicit in the rule of sustainable use. Sustainable use requires a common responsibility of States to protect the environment and therefore overlaps with the principle of common but differentiated responsibility. This overlap is partly a symptom of drawing rules and principles from different fields of international law. However, such an approach does little to develop a coherent international law of sustainable development.

The synopsis has to be that the attempts to develop international law in the field of sustainable development have failed to base such rules and principles on existing international law, and the present capabilities of international law. As a result, the value of these attempts in advancing international law in the field of sustainable development is negligible. While it is desirable to ensure that States promote purely national environmental and developmental activities capable of meeting the needs of the present without jeopardising the ability of future generations to their own needs, it is not the task of international law to implement such an objective. As Birnie and Boyle note:

> "Given the social, political, and economic value judgements involved in deciding on what is sustainable, and the necessity of weighing conflicting factors, of which environmental protection is only one, it is difficult to see an international court

> reviewing national action and concluding that it falls short of a standard of "sustainable development."[214]

How can international law best be utilised in order to promote sustainable development? Can lessons be learnt from the law of international watercourses?

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[214] Birnie, P.W. & Boyle, A.E., *International Law and the Environment* (2nd Ed., Oxford University Press 2002), at 96.

CHAPTER FIVE

RECONCILING COMPETING INTERESTS OVER INTERNATIONAL WATERCOURSES: EQUITABLE AND REASONABLE USE

The introduction to this thesis explained why the law of international watercourses provided a useful "case study" for the advancement of international law in the field of sustainable development. It was suggested that the law of international watercourses had evolved into a system by which States reconcile their competing economic, social and environmental interests. The introduction also noted that the law of international watercourses was made up of substantive and procedural "rules of the game", which provide a framework for the allocation and a mechanism for the avoidance and peaceful resolution of water disputes.

The purpose of the next two chapters will be to examine the law of international watercourses in greater depth. The intention of this section is not to present a comprehensive analysis of the law of international watercourses, but rather to draw upon certain aspects of it in a bid to identify how the law reconciles competing economic, social and environmental interests between States. Pursuant to this aim, this chapter will be dedicated to the main substantive rule of equitable and reasonable use. The next chapter will look at the procedural rules and mechanisms that support the implementation of the equitable and reasonable use rule.

5.1 The Legal Basis of Equitable and Reasonable Use

In the past, alternative claims of State entitlement over international watercourses were advocated - the most extreme being based upon the doctrines of absolute territorial sovereignty and absolute territorial integrity. Claims based on absolute territorial sovereignty, a favourite of upstream States, would allow a State unlimited use of an international watercourse falling within that State's territory regardless of the needs and concerns of other watercourse States.[1] Conversely, the principle of absolute territorial integrity, which tends to favour downstream States, prohibits an upstream State from interfering with the natural flow and conditions of an international watercourse.[2] Neither of the two approaches gained much support for a number of obvious reasons. Watercourse States are not easily segregated into upstream or downstream States. For international watercourses flowing through three or more States, a State may be both upstream and downstream. Two or more international watercourses may flow from, and into, the territory of the same State. What is more, rather than evidencing State practice, the notions of absolute territorial sovereignty and absolute territorial integrity have been used as bargaining positions by States, prior to reaching a solution based on compromise.[3] The doctrine of limited territorial sovereignty, a compromise solution, is now widely accepted by States as the basis upon which the substantive rules of the law of international watercourses have evolved.[4]

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[1] See generally, McCaffrey, S.C., *Second Report on the Law of the Non-navigational Uses of International Watercourses*, [1991] 2(2) Y.B. Int'l L. Comm'n, at 105-109, UN Doc. A/CN.4/SER.A/1991/Add.1 (Part 2).
[2] Berber, F.J., *Rivers in International Law* (Stevens & Sons Limited, London 1959), at 19-22.
[3] *See* McCaffrey, S.C., "The Harmon Doctrine One Hundred Years Later: Buried, Not Praised," 36 Nat. Resources J. 549 (1996).
[4] Tanzi, A. & Arcari, M., *The United Nations Convention on the Law of International Watercourses – A Framework for Sharing* (Kluwer Law International, London 2001), at 14-15.

In seeking to find a middle ground between the two extreme doctrines of absolute territorial sovereignty and absolute territorial integrity, limited territorial sovereignty stipulates that States must respect the sovereignty of other States. Within the context of international watercourses, limited territorial sovereignty means that watercourse States enjoy equal rights to the utilisation of an international watercourse, and each watercourse State must respect the correlative rights of other watercourse States.[5] The doctrine of limited territorial sovereignty provides the theoretical basis for the main substantive rule of the law of international watercourses, that of equitable and reasonable use. The rule of equitable and reasonable use is well recognised as part of customary international law, as evidenced by international agreements,[6] non-binding instruments,[7] decisions of courts and tribunals,[8] and in the writings of publicists.[9]

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[5] *Id.*

[6] *See* Article 5 of the Convention on the Non-Navigational Uses of International Watercourses, May 21, 1997 (not yet in force), *reprinted in* 36 I.L.M. 700 (1997); Article 3(7) of the SADC Revised Protocol on Shared International Watercourses, Aug. 7, 2000 (not yet in force), *reprinted in* 40 I.L.M. 321 (2001); Article 2(c) of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Mar. 17, 1992 (entered into force Oct. 6, 1996), *reprinted in* 31 I.L.M. 1312 (1992); Article 3(5) of the Treaty on the Development and Utilisation of the Water Resources of the Komati River Basin between Swaziland and South Africa, Mar. 13, 1992, *reprinted at* <http://www.kobwa.co.za/kobwa_treaty_menu.cfm>, (visited Jun. 3, 2003); Article 5 of the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, Apr. 5, 1995 (entered into force Apr. 5, 1995), *reprinted in* 34 I.L.M. 864 (1995); Article 2(1) of the Convention on the Co-operation for the Protection and Sustainable Use of the Danube River, June 29, 1994 (entered into force Oct. 22, 1998), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2003); Preamble of the Agreement between the Governments of Angola, the Republic of Botswana and the Republic of Namibia on the establishment of a Permanent Okavango River Basin Water Commission (OKACOM), Sep. 15, 1994 (entered into force Sep. 15, 2003), <http://www.fao.org/docrep/W7414B/w7414b0m.htm>, (visited Jun. 13, 2003); Preamble of the Treaty on the Lesotho Highlands Water Project, Oct. 24, 1986 (entered into force Oct. 24, 1986), <http://www.fao.org/docrep/W7414B/w7414b0w.htm>, (visited Jun. 12, 2003); Article 1 of the Treaty for Amazonian Co-operation, July 3, 1978 (entered into force Feb. 2, 1980), *reprinted in* 17 I.L.M. 1045 (1978).

McCaffrey's Second Report, *supra* note 1, lists over 70 international agreements relating to equitable utilisation; See also Schwebel, S., *Second Report on the Law of Non-navigational Uses of International Watercourses*, [1980] 2(2) Y.B. Int'l L. Comm'n, U.N. Doc. A/CN.4/332 and Corr.1 and Add.1, para. 41;

Under the 1997 UN Watercourses Convention, "watercourse States shall in their respective territories utilise an international watercourse in an equitable and reasonable

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Commentary to *Draft Articles on the Law of the Non-navigational Uses of International Watercourses*, *in Report of the International Law Commission on the work of its forty-sixth session*, UN GAOR, 49th Sess., Supp. (No. 10), U.N. Doc. A/49/10 (1994), *reprinted in* [1994] 2(2) Y.B. Int'l L. Comm'n, at 222, para. 24. The commentary concluded that:

> "A survey of all available evidence of general practice of States, accepted as law, in respect of the non-navigational uses of international watercourses - including treaty provisions, positions taken by States in specific disputes, decisions of international courts and tribunals, statements of law prepared by intergovernmental and non-governmental bodies, the views of learned commentators and decisions of municipal courts in cognate cases - reveals that there is overwhelming support for the doctrine of equitable utilisation as a general rule of law for the determination of the rights and obligations of States in this field."

[7] *See* Article IV of the *Helsinki Rules on the Uses of the Waters of International Rivers,* adopted by the ILA at the 52nd Conference, Helsinki, Finland, Aug. 1966*, reprinted in* Bogdanović, S., *International Law of Water Resources – Contribution of the International Law Association (1954-2000)*, 89 (Kluwer Law International, The Hague 2001); Article 3 of the *Utilisation of Non-maritime International Waters (except for Navigation),* Resolution adopted by the Institute of International Law, Salzburg, Austria, Sep. 13, 1961, *in* 49 Annuaire de l'Institut de Droit International, Vol. II, 381 (1961); UN, "Report of the United Nations Water Conference," Mar del Plata, 14-25, 1977, UN Publications, Sales No. E.77.II.A.12.; *Action Plan on the Human Environment*, June 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1421 (1972), refers to the equitable utilization rule, in its recommendation 51(b)(iii), which states that: "the net benefits of hydrologic regions common to more than one national jurisdiction are to be shared equitably among the nations affected."

[8] Support for the principle in international courts and tribunals includes Case Concerning the Gabcikovo-Nagymaros Project (Hung. v. Slovak.), 37 I.L.M. 162 (1998) (Sept. 25, 1997); Territorial Jurisdiction of the International Commission of the River Oder (UK, Czechoslovak Republic, Denmark, France, Germany and Sweden v Poland) (Judgment) [1929] PCIJ (ser A), No 23; Diversion of Water from the Meuse (The Netherlands v Belgium) (Merits) [1937] PCIJ (ser A/B), No 70; Lake Lanoux Arbitration (France v Spain) (1957) 24 Int'l L. Rpt. 101; Würtemberg and Prussia v. Baden, (the "Donauversinkung" case) Ann. Dig. 128 (1927-28).; Societe energia electrique du littoral mediterraneen v. Compagnia imprese elettriche liguri (1939) Ann. Dig. 128 (2938-40), 1938-1940, at 121.

[9] *See* Bourne, C.B., "The Right to Utilise the Waters of International Rivers," 3 Can. Y.B. Int'l L. 187 (1965), *in* Wouters, P.K. ed., *Selected Writings of Professor Charles B. Bourne* 25 (Kluwer Law International, London 1997), at 26; Bruhacs, J., *The Law of Non-navigational Uses of International Watercourses* (Martinus Nijhoff Publishers, Dordrecht 1993); Caflisch, L., "Regulation of the Uses of International Watercourses," *in* Salman, M.A.S., Boisson de Chazournes, L, eds., *International Watercourses - Enhancing Cooperation and Managing Conflict, Proceedings of a World Bank Seminar*, World Bank Technical Paper No. 414, 1998, p. 3., at 13; McCaffrey, S.C. & Sinjela, M., "The 1997 United Nations Convention on International Watercourses," 92 Am. J. Int'l L. 97 (1998); Tanzi, M. & Tanzi, A., *The United Nations Convention on the Law of International Watercourses – A Framework for Sharing* (Kluwer Law Int, The Hague 2001); Wouters, P.K., "An Assessment of Recent Developments in International Watercourse Law through the Prism of the Substantive Rules Governing Use Allocation," 36 Nat. Resources J. 417 (1996), at 419.

manner."[10] Although couched in terms of an obligation under the 1997 UN Watercourses Convention, the rule also infers a right to an equitable and reasonable share in the uses of an international watercourse.[11] The next section will be dedicated to the question of how States determine their respective rights and obligations pursuant to the rule of equitable and reasonable use.

5.2 What is Equitable and Reasonable Use?

A good starting place for understanding how the rule of equitable and reasonable use operates in the context of international watercourses[12] is the ILC's commentary to its 1994 Draft Articles:

> "In many cases, the quality and quantity of water in an international watercourse will be sufficient to satisfy the needs of all watercourses States. But where the quantity or quality of the water is such that all the reasonable and beneficial uses of all watercourses States cannot be fully realised, a "conflict of uses" results. In such a case, international practice recognises that some adjustments or accommodations are required in order to preserve each watercourse State's equality of right. These adjustments or accommodations are to be arrived at on the basis of equity, and can best be achieved on the basis of specific watercourses agreements." [13]

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[10] UN Watercourses Convention, Article 5(1) *supra* note 6.
[11] Helsinki Rules *supra* note 7. Article IV of the ILA Helsinki Rules on the Uses of the Waters of International Rivers, provide that: "Each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin."
[12] For a detailed analysis of how equitable and reasonable use is implemented, *see* IWLRI, *Sharing Transboundary Waters – An Integrated Assessment of Equitable Entitlement*, *available at* <www.dundee.ac.uk/law/iwlri>, (visited Jun. 5, 2003).
[13] Commentary to ILC 1994 Draft Articles*, supra* note 6.

The ILC commentary explains that the rule of equitable and reasonable use will only be applicable in the case of a "conflict of uses". A situation must therefore arise whereby one or more watercourse States is unable to satisfy its needs as a result of another States use of an international watercourse. While the ILC's commentary states that in many cases the needs of all watercourse States will be satisfied, growing pressure on international watercourses, will increase the likelihood of a "conflict of uses" arising.[14] The rule of equitable and reasonable will therefore has an increasingly important role to play in reconciling State interests over international watercourses.

5.2.1 What is Reasonable?

The ILC commentary noted that only "reasonable and beneficial" uses will be relevant to a determination of what is equitable.[15] Similarly, in *Colorado v. New Mexico* the US Supreme Court stated that, "our prior cases clearly establish that equitable apportionment will protect only those rights to water that are *reasonably* required and applied." [emphasis added][16] This approach means that before considering whether a use is equitable, States must first determine whether their use of an international watercourse is "reasonable and beneficial". If it can be established that a use is not "reasonable and beneficial" then it will not be protected under international law. What therefore constitutes a "reasonable and beneficial use"?

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[14] *See supra* pp. 6-10.
[15] The ILC Commentary to 1994 Draft Articles, *supra* note 6, only makes reference to "reasonable and beneficial uses" when determining whether the needs of watercourse States cannot be fully realised.
[16] Colorado v. New Mexico 459 U.S. 176 (1982). The decision of the US Supreme Court have proved useful because in transboundary disputes US States are treaty as if they were sovereign, and the Court therefore applies international law in the field of transboundary water disputes (Lipper, J., "Equitable Utilisation", *in* Garretson, A.H., Hayton, R.D. & Olmstead, C.J., eds., *The Law of International Drainage Basins* (Dobbs Ferry, New York 1967), at 41).

The use of the term "reasonable and beneficial" in the ILC commentary might appear superfluous since all reasonable uses must be beneficial. For a use to be beneficial the only condition is that the use be of some economic or social value;[17] the degree of value derived from the use is immaterial.[18] However, some beneficial uses may not be considered reasonable if their economic or social value is minimal and they cause a high degree of harm. For example, badly managed irrigation schemes within a State which cause widespread erosion and increased sedimentation of the watercourse, may not be considered a reasonable use despite the economic or social value derived from the agricultural land irrigated. Benefit (economic or social value) is therefore better viewed as a factor to be considered when determining whether a use is reasonable. The question therefore becomes, what constitutes a "reasonable" use of an international watercourse?

Much of the commentary relating to equitable and reasonable use has neglected to discuss what is meant by a "reasonable use."[19] Part of the reason for this may arise from the fact that the notions of "equity" and "reasonableness" are not clearly distinguished in international agreements or discourse. The 1997 UN Watercourses Convention applies the term "equitable and reasonable" throughout, without providing an explanation of the difference between the terms. However, despite the lack of a clear distinction the

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[17] See Commentary to the *Helsinki Rules on the Uses of the Waters of International Rivers,* adopted by the ILA at the 52nd Conference, Helsinki, Finland, Aug. 1966*, reprinted in* Bogdanović, S., *International Law of Water Resources – Contribution of the International Law Association (1954-2000)*, 89 (Kluwer Law International, The Hague 2001). *See also* Lipper, *supra* note 21, at 46 and Bourne, *supra* note 9, at 49.

[18] Washington v. Oregon, 297 U.S. 517, 527 (1936), "The essence of the doctrine of prior appropriate is beneficial use, not a stale of barren claim."

[19] For notable exceptions, see Barberis, R., "The Development of International Law of Transboundary Groundwater," 31 Nat. Resources J. 167 (1991); Wouters, P.K., "The Legal Response to International

"reasonable" component of the rule of equitable and reasonable use does perform an essential and separate task worthy of individual consideration.

The notion of "reasonableness" has a long tradition of effective application in law. [20] In the law of negligence the notion of "reasonableness", or the "reasonable man" test, has been used as an objective standard for determining whether a person's conduct has breached a legal duty of care owed to others. The Scot's Law of Delict provides an excellent example of applying the standard of the notion of reasonableness when determining what duty of care is owed under law by particular classes of persons. The duty of care owed is that of "reasonable care", which is defined as "what we should expect in the like case from a man [or woman] of ordinary sense, knowledge, care and prudence, having regard to what such a person must be taken to have known and what he [or she] should have foreseen."[21] Ascertaining "reasonableness" is therefore considered to be an objective standard that is applied similarly in like situations. The duty of care is not one of perfection, whereby all conceivable probabilities must be guarded against, but only one that the ordinary man would guard against.[22] However, where a person possesses skills in a particular trade or profession, the standard will be assessed as one of a reasonable person with similar skills.[23]

Water Conflicts: The UN Watercourse Convention and Beyond" 42 Ger. Y.B. Int'l L. 293 (1999), at 326; Bourne, *supra* note 9, at 49, although Bourne only considers the need for a use to be beneficial.

[20] Dissenting Opinion of Judge Jessup in South West Africa cases, (Ethiopia v. South Africa, Liberia v. South Africa) second phase , I.C.J. Rep, 4, at 434 – 441.

[21] Walker, D.M., *The Law of Delict in Scotland* (Green, Edinburgh 1981), at 199.

[22] *Hawkins* v. *Coulsdon & Purley U.D.C.* [1954] 1 Q.B. 319, 341, *per* Rommer L.J.

[23] Griffiths v. Arch Engineering Co. Ltd [1968] 3 All E.R. 217.

Although what is reasonable will depend on the factors and circumstances of each case the method for determining what is reasonable will be uniform. As Corten writes:

> "… "reasonable" is … both relative, since it holds for a specific community only, and temporary, to the extent that its meaning can be modified as a result of new discussion. Yet, it remains "rational," i.e., coherent or logical, to the extent that one accepts a contemporary conception of rationality, sometimes referred to as "post-modern" or "post-metaphysical," that is, rationality deprived of an ontological foundation."[24]

The method for determining reasonable use must therefore discover what constitutes a "contemporary conception of rationality." Numerous policy instruments exist in the field of water resources management which can help to ascertain what constitutes a "reasonable use", based on a contemporary conception of rationality. These instruments include the 1972 Stockholm Action Plan,[25] 1977 UN Mar Del Plata Action Plan,[26] the 1992 Dublin Statement on Water and Development,[27] the 1992 Agenda 21,[28] the 1994 Secretary-General Report on Freshwater,[29] the 1997 Programme for Further Implementation of Agenda 21,[30] the 1997 Secretary-General Comprehensive Assessment

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[24] Corten, O., "The Notion of 'Reasonable' in International Law: Legal Discourse, Reason and Contradictions," 49 Int'l & Comp. L.Q. 613 (1999), at 623.
[25] Stockholm Action Plan, *supra* note 7.
[26] Mar Del Plata Action Plan, *supra* note 7.
[27] *Dublin Statement on Water and Sustainable Development*, Dublin, Ireland, Jan. 31, 1992, *reprinted in* 22 Envtl. Pol'y and Law 54 (1992).
[28] *Agenda 21: A Programme for Action for Sustainable Development*, Rio de Janeiro, Brazil, Jun. 13, 1992, *in Report of the United Nations Conference on Environment and Development,* Annex II, U.N. Doc. A/Conf.151/26 (Vol. II) (1992).
[29] *Freshwater Resources, Report of the Secretary-General,* U.N. Commission on Sustainable Development, 2nd Sess., UN Doc. E/CN.17/1994/4 (1994).
[30] *Programme for the Further Implementation of Agenda 21,* G.A. Res. S/19-2, U.N. GAOR, 19th Spec. Sess., 11th Plen. Mtg., Agenda Item 8, U.N. Doc. A/Res/S-19/2 (1997).

on Freshwater Resources,[31] 1998 UN Secretary-General Report on Strategic Approaches to Freshwater Management,[32] the 1998 Paris Ministerial Declaration on Water and Sustainable Development,[33] the 1998 Berlin Recommendation on Transboundary Water Management,[34] the outcomes of the 2002 Second World Water Forum (the World Water Vision, the Framework for Action, and the Hague Declaration on Water Security),[35] the outcomes of the 2002 Bonn Conference on Water and Sustainable Development (Ministerial Declaration, African Ministerial Declaration, Recommendation for Action, and Bonn keys),[36] the 2002 Report of Secretary-General – Water: A key to sustainable development,[37] the 2002 Report of Secretary-General – Implementing Agenda 21, [38] the

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[31] *Comprehensive Assessment of the World's Freshwater, Report of the Secretary General*, U.N. Commission on Sustainable Development, 5th Sess., U.N. Doc. E/CN.17/1997/9 (1997), <http://www.un.org/esa/sustdev/sdissues/water/water_documents.htm>, (visited Jun. 13, 2003).

[32] *Strategic Approaches to Freshwater Management*, *Report of the Secretary-General*, U.N. Commission on Sustainable Development, 6th Sess., U.N. Doc. E/CN.17/1998/2/Add.1 (1998).

[33] *Ministerial Declaration on Water and Sustainable Development*, Paris, France, Mar. 21, 1998, *reprinted at* <http://www.iisd.ca/sd/frh2o.html>, (visited May 9, 2002).

[34] *Recommendations on Transboundary Water Management*, Berlin, Germany, Sep. 30, 1998, <http://lnweb18.worldbank.org/ESSD/essdext.nsf/18ByDocName/StrategyBerlinRoundtable>, (visited Jun. 13, 2003).

[35] *Ministerial Declaration of the Hague on Water Security in the 21st Century*, The Hague, The Netherlands, Mar. 22, 2000, *reprinted at* <www.worldwaterforum.net/Ministerial/declaration.html>, visited Jun. 13, 2003); Cosgrove, W.J., & Rijsberman, F.R., *World Water Vision – Making Water Everybody's Business* (Earthscan Publications Ltd., London 2000); Would Water Partnership, *Towards Water Security: A framework for action (2000), available at* <http://www.gwpforum.org/Library.htm>, (visited Jun. 11, 2001).

[36] Ministerial Declaration of the Bonn Conference on Water – A Key to Sustainable Development, Bonn, Germany, Dec. 4, 2001, reprinted at <http://www.water-2001.de/outcome/ >, (visited Jun. 13, 2003); *Recommendations for Action of the Bonn Conference on Water – A Key to Sustainable Development,* Bonn, Germany, Dec. 4, 2001, *reprinted at* <http://www.water-2001.de/outcome/ >, (visited Jun. 13, 2003)**;** *Bonn Keys of the Bonn Conference on Water – A Key to Sustainable Development,* Bonn, Germany, Dec. 4, 2001, *reprinted at* <http://www.water-2001.de/outcome/>, (visited Jun. 13, 2003).

[37] *Water: A Key Resource for Sustainable Development, Report of the Secretary-General*, U.N. Commission on Sustainable Development, Organisational Sess., U.N. Doc. A/CN.17/2001/PC/17 (2001), *available at* <http://www.un.org/esa/sustdev/sdissues/water/water_documents.htm>, (visited Jun. 13, 2003).

[38] *Implementing Agenda 21, Report by the Secretary-General,* U.N. Commission on Sustainable Development, 2nd Sess., U.N. Doc. A/CN.17/2002/PC.2/7 (2001), *available at* <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003).

2002 Johannesburg Plan of Implementation,[39] and the outcomes of the 2003 Third World Water Forum (Ministerial Declaration and World Water Actions).[40]

While in many cases the documents may reflect best practices or aspirations, they also reflect certain standards that should be taken into account. It would appear from a review of these documents that unsustainable uses would not fit the criteria of a reasonable use. The UN Millennium Declaration, for example, calls on States to "stop unsustainable exploitation of water resources."[41] Agenda 21 recognises a need "to make certain that adequate supplies of water of good quality are maintained for the entire population of the planet, while preserving the hydrological, biological and chemical functions of ecosystems, adapting human activities within the capacity limits of nature and combating vectors of water-related diseases."[42] Put simply, any use that failed to respect the "renewability" of water must be seen as unsustainable. In the *Wyoming v. Colorado* case, the US Supreme Court held that the reasonable use condition placed US States under a duty "to conserve the common supply" of a watercourse.[43]

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[39] Plan of Implementation of the World Summit on Sustainable Development, Report of World Summit on Sustainable Development, Johannesburg, South Africa, Aug. 26 – Sep. 4, 2002, at 6, U.N. Doc. A/Conf.199/20 (2002), reprinted at <http://www.johannesburgsummit.org/html/documents/documents.html>, (visited Jun. 13, 2003).

[40] *Ministerial Declaration of the 3rd World Water Forum*, Kyoto, Japan, Mar. 23, 2003, *available at* <http://www.world.water-forum3.com/jp/mc/md_final.pdf>, (visited Jun. 13, 2003); and World Water Actions – Making Water Flow, Mar. 2003, *available at* <http://www.world.water-forum3.com/>, (visited Jun. 3, 2003).

[41] *United Nations Millennium Declaration*, G.A. Res. 55/2, U.N. GAOR, 55th Sess., 8th Plen. Mtg., Agenda Item 60(b), U.N. Doc. A/Res/55/2 (2000), *available at* <http://www.un.org/millennium/declaration/ares552e.htm>, (last visited Jun. 13, 2003).

[42] Agenda 21, *supra* note 28, at para. 18.2.

[43] Wyoming v. Colorado 259 U.S. 419 (1922) at 483.

Important lessons on what constitutes a reasonable use can be learnt from the application of reasonableness in other areas of law, such as the aforementioned law of delict. A reasonable use may therefore not necessarily be the best possible use of an international watercourse as the notion of reasonableness does not require perfection.[44] Some inefficiency or wastefulness may be tolerated. The ILA Commentary to the Helsinki Rules noted that:

> "A "beneficial use" need not be *the* most productive use to which the water may be put, nor need it utilize the most efficient methods known in order to avoid waste and insure maximum utilisation. As to the former, to provide otherwise would dislocate numerous productive and, indeed, essential portions of national economies; the latter, while a patently imperfect solution, reflects the financial limitations of many States; in its application, the present rule is not designed to foster waste but to hold States to a duty of efficiency which is commensurate with their financial resources. Of course, the ability of a State to obtain international financing will be considered in this context. Thus, State A, an economically advanced and prosperous State which utilizes the inundation method of irrigation, might be required to develop a more efficient and less wasteful system forthwith, while State B, an underdeveloped State using the same method might be permitted additional time to obtain the means to make the required improvements." [45]

What is reasonable may therefore vary depending on the stage of development of a State. A State with the technical and financial capability to employ more efficient means for

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[44] Hawkins, *supra* note 22.
[45] ILA Commentary, *supra* note 17, at 487.

utilising an international watercourse should be expected to be at a higher standard than the least developed watercourse States.

5.2.2 What is Equitable?

Where it can be established that there is a conflict of uses between States, and all the conflicting uses are considered reasonable, resolving the conflict will be determined by what is "equitable". In the Württemberg Case it was stated:

> "The application of this principle [of equity] is governed by the circumstances of each particular case. The interests of the States in question must be weighed in an equitable manner against one another. One must consider not only the absolute injury caused to the neighbouring State, but also the relation of the advantage gained by one to the injury caused to the other." [46]

Determining what constitutes an equitable use of an international watercourse involves weighing and balancing the competing interests of States. Article 6(1) of the 1997 UN Watercourses Convention identifies a non-exhaustive list of factors and circumstances that should be taken into account when balancing the interests of States:

> "Utilisation of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:

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[46] Württemberg, *supra* note 8, at 131.

(a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;

(b) The social and economic needs of the watercourse States concerned;

(c) The population dependent on the watercourse in each watercourse State;

(d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;

(e) Existing and potential uses of the watercourse;

(f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;

(g) The availability of alternatives, of comparable value, to a particular planned or existing use."[47]

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[47] UN Watercourses Convention, *supra* note 6. A similar approach is adopted by Article V of the Helsinki Rules, *supra* note 16, in which it is provided that:

"(1) What is a reasonable and equitable share … is to be determined in the light of all the relevant factors in each particular case.

(2) Relevant factors which are to be considered include, but are not limited to:

(a) the geography of the basin, including in particular the extent of the drainage area in the territory of each basin State;
(b) the hydrology of the basin, including in particular the contribution of water by each basin State;
(c) the climate affecting the basin;
(d) the past utilization of the waters of the basin, particular existing utilization; including in
(e) the economic and social needs of each basin State;
(f) the population dependent on the waters of the basin in each basin State;
(g) the comparative costs of alternative means of satisfying the economic and social needs of each basin State;
(h) the availability of other resources;
(i) the avoidance of unnecessary waste in the utilization of waters of the basin;
(j) the practicability of compensation to one or more of the co-basin States as a means of adjusting conflicts among uses; and
(k) the degree to which the needs of a basin State may be satisfied, without causing substantial injury to a co-basin State.

Article 10 of the UN Watercourses Convention goes on to state that, "in the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses."[48] Similarly, Article VI of the Helsinki Rules provides that "a use or category of uses is not entitled to any inherent preference over any other use or category of uses."[49]

5.3 Reconciling Fundamental Interests

While the weight given to a particular use will ultimately depend on the factors and circumstances of a particular case, certain general assumptions can guide States in the implementation of equitable and reasonable use.[50] For the purposes of this thesis, and in order to assess how economic, social and environmental interests are balanced, the following section will be divided into three broad categories - vital human needs, social and economic uses, and ecosystems and environmental issues.

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(3) The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable share, all relevant factors are to be considered together and a conclusion reached on the basis of the whole."

[48] UN Watercourses Convention, *supra* note 6.
[49] Helsinki Rules, *supra* note 7.
[50] The International Water Law Research Institute has developed a factor-analysis approach by which to assist States in the implementation of the rule of equitable and reasonable use, *see* IWLRI, *Sharing Transboundary Waters – An Integrated Assessment of Equitable Entitlement,* <www.dundee.ac.uk/law/iwlri>, (visited Jun. 5, 2003). The so called "Legal Assessment Model" (LAM) comprises four phases. Phase one is the scoping phase which involves a review of the legal, hydrographic, economic and policy contest of the international watercourses in question. Phase two, data collection, involves collecting all data necessary in order to assess what is equitable and reasonable. Phase three involves the evaluation of the data which includes a list of indicative questions designed to provide a States with a systematic assessment of whether its current use of an international watercourse is equitable and reasonable. The final phase provides options which are available to a State in order to enforce its legal rights and meet its legal obligations.

5.3.1 Vital human needs

Humans can exist without many things but deprived of water they can only survive for a few days. Water to meet human needs is usually afforded priority when determining what is equitable. The 1997 UN Watercourses Convention recognises the importance of human needs under Article 10(2): "In the event of a conflict between uses of an international watercourse, it shall be resolved with reference to Articles 5 and 7, with special regard being given to the requirements of vital human needs."[51]

The Statement of Understanding attached to the 1997 UN Watercourses Convention defined the term "vital human needs" as "sufficient water to sustain human life."[52] This definition begs the question, what uses are necessary to sustain human life? Some guidance is given by the Statement of Understanding, which notes that water necessary to sustain human life *includes*, "both drinking water and water required for the production of food in order to prevent starvation."[53] Water required for the production of food in order to prevent starvation will only be relevant in the rural context where the population is dependent on agriculture. Clearly, in the use of the word "includes", the definition contained in the Statement of Understanding is non-exhaustive. What other human uses would therefore be appropriate? What of water used to sustain livelihoods? Could water used for subsistence farming be included? Is a certain quality of life recognised? While there is no definitive answer to these questions it is reasonable to assume, based on the

[51] UN Watercourses Convention, *supra* note 6.
[52] UN Watercourses Convention, *supra* note 6.
[53] UN Watercourses Convention, *supra* note 6.

Statement of Understanding and the ordinary meaning of the words, that what is intended by the term "vital human needs" is only the most essential needs in order to prevent death from dehydration or starvation.

The 2002 Revised Draft ILA Rules on Equitable and Sustainable Use in the Management of Waters also adopts the term "vital human needs."[54] In a similar approach to the 1997 UN Watercourses Convention, "vital human needs" is defined as "water used for immediate human survival."[55] However, the ILA offers a longer list of uses than the 1997 UN Watercourses by stating that "water used for immediate human survival, includes drinking, cooking and sanitary needs, as well as water needed for immediate sustenance of a household."[56]

The 2002 General Comment on the right to water attached to the 1966 UN International Covenant on Economic, Social and Cultural Rights adopts a wider approach than the 1997 UN Watercourses Convention and the Draft ILA Rules by referring to "personal and domestic uses" rather than "vital human needs".[57] "Personal and domestic uses" are

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[54] Article 13 of the Revised International Law Association Rules on Equitable and Sustainable Use in the Management of the Waters, Preliminary Seventh Draft, March 2002, <http://www.ila-hq.org>, (visited Jun. 3, 2003).
[55] Article 13(2), *id.*
[56] *Id.*
[57] Paragraph 2 of the *General Comment No. 15 – The Right to Water (Articles 11 and 12 of the International Covenant on Economic, Social and Cultural Rights, Committee on Economic, Social and Cultural Rights)*, 29th Sess., U.N. Doc. E/C.12/2002/11 (2002), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html#Policy>, (visited May 18, 2003). The legal basis of UN activities in the field of human rights can be found in three key instruments: The 1948 Universal Declaration of Human Rights, the 1966 International Covenant on Civil and Political Rights, and the 1966 Covenant on Economic, Social and Cultural Rights. The International Covenant on Economic, Social and Cultural Rights was adopted and opened for signature, ratification and accession on the 16th December, 1966, following around 20 years of deliberation and drafting. The Covenant entered into force on the 3rd of January 1976 and has been ratified by 146 States. Article 11 on the right to an adequate standard of living and Article 12 on the right to the highest attainable standard of physical and

described as ordinarily including: drinking (water consumption through beverages and foodstuffs); personal (disposal of human excreta); washing of clothes; food preparation (including food hygiene); and personal and household hygiene (including personal cleanliness and hygiene of the household environment).[58] However, water required for the production of food in order to prevent starvation is not explicitly included as part of "personal and domestic uses."

At the national level, the 1996 Constitution of South Africa grants "everyone the right to have access to … sufficient food and water."[59] Pursuant to this right the 1997 Water Services Act provides that "everyone has the right of access to basic water supply and basic sanitation."[60] "Basic sanitation" is defined as "the prescribed minimum standard of services necessary for the safe, hygienic and adequate collection, removal, disposal or purification of human excreta, domestic waste-water and sewage from households, including informal households."[61] "Basic water supply" is defined as "the described minimum standard of water supply services necessary for the reliable supply of a sufficient quantity and quality of water to households, including informal households, to support life and personal hygiene."[62]

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mental health are the most prevalent to water. The General Comment on the Right to Water seeks to clarify the water related aspects of these Articles.

[58] *Id.*

[59] Article 27(1) of the Constitution of the Republic of South Africa, as adopted on 8 May 1996 and amended on 11 October 1996 by the Constitutional Assembly, Act 108 of 1996, *available at* <www.polity.org.za/govdocs/legislation/ 1993/constit0.html>, (visited Mar. 17, 2003).

[60] *Id.* Article 3(1) of the South African Water Services Act, assented to Nov. 27, 1997, Act 108 of 1997, *available at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_National.html>, (visited Mar. 18, 2003).

[61] *Id.* Article 1(ii).

[62] South African Water Act, *supra* note 59, Article 1(iii).

Various writers have tackled the issue of what should be included in "human needs".[63] Gleick looked at the water required to meet "basic human needs".[64] He included drinking water (enough to sustain life in moderate climatic conditions with average activity levels), sanitation services, bathing, cooking and kitchen uses. Water for the production of food was not included in his proposed basic water requirement.[65]

More important than a definition of what is included in human needs is the weight to be afforded such needs. The use of the term "special regard" in Article 10(2) of the 1997 UN Watercourses Convention introduces the presumption that water to meet vital human needs will, in almost all circumstances, take precedence over all other uses.[66] The ILA Draft Articles seek to take this approach one step further by stipulating that, "in determining an equitable and reasonable use, States shall first allocate waters to satisfy vital human needs."[67] The General Comment on the Right to Water provides that, "the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses."[68] Various other treaties[69] and non-binding instruments[70] refer to a "right to water". With regard to

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[63] Falkenmark, M., & Widstrandt, C., "Population and Water Resources: a Delicate Balance", 47 Population Bulletin, Population Reference Bureau, Washington DC, 1992; Gleick, P.H., "Basic Water Requirements for Human Activities: Meeting Basic Needs", 21 Water Int'l 83 (1996); Libiszewski, S., "Water Disputes in the Jordan Basin Region and their Role in the Resolution of the Arab-Israeli Conflict", ENCOP Occasional Paper No. 13, Centre for Security, Policy and Conflict; Bartram, J. & Howard, G., "Domestic Water Quantity, Service Level and Health: what should be the goal for water and health sectors", WHO, 2002.

[64] Gleick, *id.*.

[65] Gleick, *supra* note 63, at 88.

[66] *See* McCaffrey, S.C., "A Human Right to Water: Domestic and International Implications", 5 Geo. Int'l Envtl. L. Rev. 1 (1992), at 22.

[67] ILA Draft Articles, *supra* note 54.

[68] General Comment, Para. 2, *supra* note 57.

[69] *See* Article 14(2)(h) of the Convention on the Elimination of All Forms of Discrimination Against Women, Dec. 18, 1979, (entered into force Sep. 3, 1981), *reprinted at* <http://193.194.138.190/html/menu3/b/e1cedaw.htm>, (visited Jun. 12, 2003); Article 24(2) of the

international watercourses, the General Comment provides that, "international cooperation *requires* State parties to refrain from actions that interfere, directly or indirectly, with the enjoyment of the right to water in other countries" [emphasis added][71] In obliging States to refrain from actions that would interfere with the enjoyment of the "right to water" does the General Comment afford "personal and domestic uses" precedence over all other uses? If so, this would be in conflict with Article 10 of the 1997 UN Watercourses Convention.

The General Comment goes on to provide, somewhat confusingly, that "any activities undertaken within the State party's jurisdiction *should* not deprive another country of the ability to realise the right to water for persons in its jurisdiction [emphasis added]."[72] This second "obligation" appears to be at variance with the former. While the former provides that States are *required* to refrain from actions that interfere with the enjoyment of the right to water in other countries, the latter merely provides that States *should* not undertake activities that interfere with the enjoyment of the right to water in another State. The use of the term "should" in the latter provision is more in keeping with the approach taken by the 1997 UN Watercourses Convention in which vital human needs is not afforded automatic priority.[73]

Convention on the Rights of the Child, Nov. 20, 1989 (entered into force Sep. 2, 1990), *reprinted at* <http://www.unicef.org/crc/fulltext.htm>, (visited Jun. 12, 2003).

[70] Ministerial Declaration of the Hague on Water Security in the 21st Century, *supra* note 40; Article 19 of the *IUCN Draft Covenant on Environment and Development* (2nd Ed. IUCN, Gland 2000); Preamble of Mar del Plata Action Plan, *supra* note 7; Agenda 21, *supra* note 28; and Principle 4 of the Dublin Statement *supra* note 27.

[71] General Comment, Para. 31, *supra* note 57.

[72] General Comment, Para. 32, *supra* note 57.

Some writers criticise the 1997 UN Watercourses Convention for not affording priority to vital human needs. Hey writes that, "vital human needs are to be included in the balancing of interest to which all uses are to be subjected, albeit with "special regard" but not with any special result that would ensure the protection of these needs."[74] Nollkaemper believes that "human needs are one factor to be considered in a balance of interests under the principle of equitable use and as such can be overridden by plans to make the desert bloom."[75] Is this indeed the case? Are vital human needs protected under the rule of equitable and reasonable use? Should vital human needs be given priority?

Affording vital human needs an automatic priority over other uses within a particular international watercourse would prove problematic because in certain circumstances it may lead to an inequitable result. For example, under the "priority of vital human needs rule", where a conflict of uses exists between State A's use of an international watercourse to meet vital human needs and State B's industrial uses, State A's use would enjoy priority. However, would the latter lead to an equitable result where State A could satisfy vital human needs from an alternative existing or potential use, and State B who was heavily reliant on the particular international watercourse, had no alternatives available?[76]

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[73] *Id.*
[74] Hey., E., "The Watercourse Convention: To What Extent Does it Provide a Basis for Regulating Uses on International Watercourses?", 7 Rev. Eur. Community & Int'l Envtl. L. 291 (1998), at 8.
[75] Nollkaemper, A., 'The Contribution of the International Law Commission to International Water Law: Does it Reverse the Flight from Substance?' 27 Netherlands Y.B. Int'l L. 39(1996), at 61
[76] Article 6(g) of the 1997 UN Watercourses Convention, *supra* note 6, lists as a factor to be taken into account when determining what is equitable and reasonable, "the availability of alternatives, of comparable value, to a particular planned or existing use" *See* Commentary to Article VI of the Helsinki Rules, *supra* note 22:

In the final analysis, where there is sufficient water available to meet vital human needs those needs will be protected under the principle of equitable and reasonable use. The need to "make the desert bloom" would never be favoured when it meant that vital human needs were not being met. The only conceivable option where another use may take priority over vital human needs in a particular international watercourse, is where it can be shown that the vital human needs in question could be met by an alternative source.

5.3.2 Economic and Social Uses

Amongst the relevant factors and circumstances listed under Article 6(1) of the 1997 UN Watercourses Convention is the social and economic needs of the watercourse States.[77] Special Rapporteur Schwebel, in his Third Report on the non-navigational uses of international watercourses, introduced an Article which provided, *inter alia,* that in determining an equitable use, "the right of a system State to a particular use of the water

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> "The purpose in insuring domestic uses a preference is to make certain that these uses - the basis of all life - are assured a first charge on the waters. Here again, however, the proposition may be inappropriate in a particular basin, where the principle of equitable utilization is to be applied. State B, for example, uses the waters of an international drainage basin for domestic purposes. State A, the upper riparian, uses the water for important industrial purposes, which result in the raising of the temperature of the water so as to make it unsuitable for drinking. An investigation discloses that only a relative handful of State B's inhabitants use the water for domestic purposes; that another equally convenient source of adequate quantities of water is available a few miles away; and that State A is prepared to pay any costs involved in making the changeover. Is State A to be barred from its use merely because the conflicting use of State B happens to be a domestic use? A rule of artificial preference would dictate such a result, although manifestly unjust."

[77] UN Watercourses Convention, *supra* note 6. Article 6(c) and (g) will also be relevant given that they refer to the population dependent on the watercourse, and the availability of alternatives, of comparable value, to a particular planned or existing use, respectively.

resources of the international watercourse system depends … upon objective evaluation of …that system State's… stage of economic development."[78] Special Rapporteur Evensen, in his First Report on the non-navigational uses of international watercourses, followed Schwebel's approach by including, although slightly altering the Article, to include as a factor in determining equitable use, "the special needs of the system State concerned for the use or uses in question in comparison with the needs of other system States, including the stage of economic development of all system States concerned."[79] The stage of economic development of a State therefore remained a factor to be taken into account. However, following discussions within the ILC in 1983, "the stage of economic development" was dropped from the text of the Articles.

It has been maintained that omitting the stage of economic development from the economic and social needs factor confines the issue of needs to the degree of economic and social dependence of a State on a particular international watercourse, rather than the wider issues of the stage of economic development of that State.[80] By making reference to the economic and social needs of the Watercourses State concerned, instead of the stage of economic development of a watercourse State, there certainly seems to be scope for arguing that the stage of economic development is less relevant. Indeed, it would be easy to imagine a situation where a developed country with a heavy economic reliance on

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[78] Schwebel, S.M., *Third Report on the Law of the Non-Navigational Uses of International Watercourses*, [1981] 2(1)Y.B. Int'l L. Comm'n, 65, U.N. Doc. A/CN.4/348, at 90.
[79] Evensen, J., *First Report on the Law of the Non-Navigational Uses of International Watercourses*, [1983] 2(1) Y.B. Int'l L. Comm'n, 155, U.N. Doc. A/CN.4/367, at 171.
[80] Fuentes, X., "The Criteria for the Equitable Utilisation of International Rivers," 67 Brit. YB Int'l L. 337 (1996), at 344.

a particular international watercourse could maintain that its economic need to use that watercourse outweighed the needs of a less developed country.

Nevertheless, there may also be scope for maintaining that the stage of economic development of a State will influence the determination of what constitutes equitable use, but it will always be contingent on the particular factors and circumstances of the case. Other factors may also favour less developed States, such as the population dependent on a watercourse[81] and the availability, or lack thereof, of alternatives of comparable value, to a particular planned or existing use.[82] In addition, reference must be made to the preamble of the 1997 UN Watercourses Convention when interpreting the substantive provisions, which notes the "special situation and needs of developing countries."[83] Ultimately, a State's stage of development might as a consequence influence the determination of what is equitable.

The level of harm caused by a particular economic or social use will be a factor to be taken into account when States determine whether their reasonable uses are equitable. Traditionally there has been a conflict between what is described as "the no significant harm rule" and the rule of equitable and reasonable use.[84] If a rule of no significant harm is part of international law then it leads to a potential conflict with the rule of equitable

[81] UN Watercourses Convention, Article 6(1)(c), *supra* note 6.
[82] UN Watercourses Convention, Article 6(1)(g), *supra* note 6.
[83] UN Watercourses Convention, *supra* note 6.
[84] Utton, A.E., "Which Rule Should Prevail in International Water Disputes: That of Reasonableness or that of No Harm?", 36 Nat. Resources J. 635 (1996).

and reasonable use because any use causing significant harm would be deemed unlawful regardless of whether it was equitable. [85]

The relationship between significant harm and equitable and reasonable use depends on a clear understanding of the no significant harm rule. If the significant harm rule refers to the obligation not to cause legal injury to other international watercourse States then it can be reconciled with the rule of equitable and reasonable use. Special Rapporteur McCaffrey, in his Second Report to the ILC, advocated such an interpretation of harm when he stated that "the focus should be on the duty not to cause legal injury (by making a non-equitable use), rather than on the duty not to cause factual harm."[86] Such an approach would reconcile the notion of equitable use with that of no harm because it essentially cites the negative part of the equitable use rule – that is, States are under an obligation not to use an international watercourse in a manner that is inequitable (causes legal injury).

If the no significant harm rule refers to factual harm there is a potential conflict between the no significant harm rule and the rule of equitable and reasonable use. Rather than there being no preference in uses, the no significant harm rule would mean that all uses that caused significant factual harm would be deemed inequitable regardless of other factors and circumstances. For example, an upstream State might be prohibited from

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[85] *See* Wouters, P., "An Assessment of Recent Developments in International Watercourse Law Through the Prism of the Substantive Rules Governing Use Allocation", 36 Nat. Resources J. 417 (1996), at 424. Rahman maintains that, "the equitable and reasonable utilization of an international watercourse by definition rules out significant harm to another watercourse state" (Rahman, R., "The Law of the Non-Navigational Uses of International Watercourses: Dilemma for Lower Riparians", 19 Fordham Int'l L.J. 9 (1995).

using an international watercourse for agricultural purposes if to do so would impact on the quality and quantity of downstream State, and significant harm resulted. The latter would be deemed inequitable regardless of whether the upstream State was perhaps heavily dependent on agriculture and lacked the financial or technical capacity to prevent the harm, and the downstream State had the financial or technical means to address the factual harm. Likewise, a downstream State could hinder the potential development of an upstream State because any planned uses by the latter would have a significant impact on the former.[87] Would it be fair for a downstream State to be able to prevent any uses in the upstream State that would cause significant harm downstream? Should a State, most likely downstream, be able to effectively block future uses of an international watercourse by making sure that the international watercourses were fully utilised within its territory? Giving priority to the no significant harm rule would favour the State that develops earlier regardless of other relevant factors, including the vital human needs of the upstream State.

The 1997 UN Watercourses Convention seeks to avoid the potential difficulties between the rule of equitable and reasonable use and the no significant harm rule by affording the former priority while giving the latter special status. Accordingly, under Article 7(1) of the 1997 UN Watercourses Convention, "watercourse States shall, in utilising an

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[86] McCaffrey, Second Report, *supra* note 1.

[87] Bourne, C.B., "The International Law Commission's Draft Articles on the Law of International Watercourses: Principles and Planned Measures", 3 Colo. J. Int'l Envt'l L. & Pol'y 65 (1992), at 71, *in* Wouters, P.K., ed., *International Water Law – Selected Writings of Professor Charles Bourne* 83 (Kluwer Law International, London 1997).

international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States."[88]

In essence, the above Article recognises that in certain circumstances taking measure to prevent significant harm may be inappropriate, or lead to an inequitable result, and some level of significant harm may therefore be tolerated. This provision is based on the notion of due diligence described earlier in the thesis.[89]

Applying due diligence to the law of international watercourses has been criticised as introducing too vague a standard for transboundary harm.[90] Is this in fact the case? Pursuant to the ILC Commentary to the 1994 Draft Articles,

> "… a watercourse State whose use causes significant harm can be deemed to have breached its obligation to exercise due diligence so as not to cause significant harm only when it has intentionally or negligently caused the event which had to be prevented or has intentionally or negligently not prevented others in its territory from causing that event or has abstained from abating it."[91]

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[88] UN Watercourses Convention, *supra* note 6.
[89] *Supra* pp. 85-87.
[90] Nollkaemper, *supra* note 74, at 75, writes:

> "While [the ILC's] reliance on due diligence is in line with traditional international legal thinking with regard to transboundary interference, the concept provides only illusory substance. The due diligence obligation is an obligation of conduct. But it is a matter of some uncertainty what such conduct might be. Unfortunately and remarkably so in view of the amount of time which the Commission spent on this issue over the course of more than 14 years, it has not clarified what had in mind when it formulated the due diligence concept."

[91] ILC Commentary to 1994 Draft Articles, *supra* note 6, at 103.

The ILC makes it clear that the duty of care is applicable where watercourse States intentionally or negligently cause an event which had to be prevented. If it can therefore be proven that a watercourse State intentionally caused significant harm to a neighbouring State, the offending State would have breached a duty of due diligence.

In determining whether a State negligently caused significant harm the duty of care owed will depend on the nature of the harm and the capacity of a State to prevent that harm. The issue is one of whether a watercourse State can be said to have satisfied a duty of care commensurate with that of a "good Government" despite significant harm being caused to another watercourse State. While the answer will depend on the factors and circumstances of a particular case, certain prerequisites can be identified. States, for instance, will owe a higher duty of care for activities involving hazardous substances than other less harmful pollutants.[92] The State must also establish and enforce legal, administrative and technical measures that are sufficient for it to fulfil its obligations to other watercourse States.[93] Such measures might include setting emission limits, licensing and permits for waste water discharges based on best available technology,[94] setting water quantitative and qualitative objectives and criteria,[95] and quantitative and qualitative monitoring and assessment, including environmental impact assessments, of

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[92] Lammers, J.G., *Pollution of International Watercourses - A Search for Substantive Rules and Principles of Law*, (Martinus Nijhoff, Boston 1984), at 350-351.
[93] McCaffrey, S.C., *Fourth Report on the Law of the Non-Navigational Uses of International Watercourses*, [1988] 2(1) Y.B. Int'l L. Comm'n, 205, U.N. Doc. A/CN.4/412 and Add.1 and 2, at 239;
[94] *See* Article 3 of the 1992 UN ECE Helsinki Convention, *supra* note 6.
[95] *See* Article 17(c) of the Campione Consolidation of the ILA Rules on International Water Resources 1966-1999, *reprinted in* Bogdanović, S., *International Law of Water Resources* – Contribution of the International Law Association (1954-2000) (Kluwer Law International, London 2001), at 65.

the watercourse.[96] An obligation of due diligence would also appear to incorporate the precautionary approach in that States will be under a duty of care to take all appropriate measures to prevent potential threats of significant harm. In determining the international rules and standards required of States, non-binding instruments will play an important role in ascertaining what can be expected from a good Government, and can shine considerable light on the duty of care required by under the obligation to "take all appropriate measures."[97]

There may also be allowance for differing standards between States within the scope of the duty to take all appropriate measures. While a minimum level of legal, administrative and technical measures will be required from all States, the economic, human and technical resources available to developed States will place them under a higher duty of care, requiring more stringent legal, administrative and technical measures to prevent transboundary harm. For example, the best available technology for limiting discharges, emissions and waste will likely differ between States, given that the "best available technology" is determined in light of economic and social factors.[98]

The argument that there is limited scope for watercourses States to cause significant harm to another watercourse State, where they have taken all appropriate measure to prevent such harm, is supported by Article 7(2) of the 1997 UN Watercourses Convention, which stipulates that,

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[96] *See* Article 3(2) of the 1992 UN ECE Helsinki Convention, *supra* note 6.
[97] Dupuy, P., "Soft Law and the International Law of the Environment," 12 Mich. J. Int'l L. 420 (1991), at 434.
[98] *See* Annex I of 1992 UN ECE Helsinki Convention, *supra* note 6.

> "*Where significant harm nevertheless is caused to another watercourse State*, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation" [emphasis added]

In making reference to articles 5 and 6, Article 7(2) of the 1997 UN Watercourses Convention supports the primacy of the rule of equitable and reasonable use. Pursuant to the 1997 UN Watercourses Convention, States are therefore not legally responsibility for causing significant harm if they can show that they have taken all appropriate measures to prevent such harm, and their use of an international watercourses is equitable and reasonable. Not only must the State take all appropriate measures to prevent such harm, but it must also ensure that its use is both equitable *and* reasonable. Ultimately, the scope for a State to cause significant harm therefore becomes very limited.

5.3.3 The Protection of the Ecosystems of an International Watercourse

Some writers have criticised the rule of equitable and reasonable use because it allegedly favours short-term development over the long-term protection of the aquatic ecosystem.[99] Nollkaemper writes that "protection of watercourses is only one factor in the balance of

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[99] *See generally* Hey, E., "Sustainable Use of Shared Water Resources: the Need for a Paradigmatic Shift in International Watercourses Law," *in* Blake G.G., ed., *The Peaceful Management of Transboundary Resources* (Martinus Nijhoff, The Netherlands 1995); Nollkaemper, *supra* note 74; Bruneé J. & Toope, S.J., "Environmental Security and Freshwater Resources: Ecosystem Regime Building," 91 Am. J. Int'l L. 26 (1997); Tarlock, D.A., "Safeguarding River Ecosystems in Times of Scarcity: Irreconcilable Interests?," Paper presented at International Water Seminar, Water Law and Policy Programme, CEPMLP, University of Dundee, June 7-10, 1999.

interest and can be outweighed by, for instance, interests of development of watercourses and social and economic needs."[100] Is the protection of an international watercourse only one more factor to be taken into account when determining what is equitable, or does the environment receive certain protection under the rule of equitable and reasonable use?

In his third report, Special Rapporteur Schwebel having reviewed State practice in this field, writes that:

> "It is believed that there has emerged, over and above the rights and obligations which two or more States may confirm and assume vis-a-vis one another, a normative principle making protection of the environment a universal duty even in the absence of agreement, a principle born of sharpened awareness of the vast ramifications consequent upon man's tampering with the intricate relationships among the elements and even agents of nature."[101]

Schwebel goes on to state that "environmental damage currently measurable solely within the territory of a system State arguably may fall under international regulation because the legal presumption is that preservation of the environment in the large is a licit concern of all nations."[102]

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[100] Nollkaemper, *supra* note 74, at 63.
[101] Schwebel, S., *Third Report on the Law of Non-navigational Uses of International Watercourses*, [1982] 2(2) Y.B. Int'l L. Comm'n, at 65, U.N. Doc. A/CN.4/348 and Corr.1 para 41.
[102] *Id*.

Support for Schwebel's contention can be found in agreements concerning international watercourses. Early international agreements contained obligations on States to protect waters in order to safeguard particular uses of the international watercourses irrespective of harm being caused to other States. The 1909 Boundary Waters Treaty between Canada and the US reads, "the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side *to the injury of health or property* on the other" [emphasis added][103] A similar provision can be found in the 1960 Convention on the Protection of Lake Constance: "riparian States are to take within their respective territories the necessary steps to prevent increased pollution of the lake and to improve the condition of its waters *from the standpoint of health*" [emphasis added][104]

Other agreements contain provisions preventing pollution of international watercourses in general from particular sources irrespective of transboundary harm. The 1934 Agreement concerning rights on the boundary between Tanganyika and Ruandi-Urundi stipulated that, "no operations of a mining or industrial nature shall be permitted by either of the

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[103] Article IV of the Treaty between Great Britain and the United States Relating to Boundary Waters, and Questions arising between the United States and Canada, Jan. 1, 1909 (entered into force May 5, 1910), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 12, 2003).

[104] Convention between the Land of Baden-Württemberg, the Free State of Bavaria, the Republic of Austria and the Swiss Confederation on the protection of Lake Constance against pollution, Oct. 27, 1960 (entered into force Dec. 10, 1961), 1960, *reprinted in Legislative Texts and Treaty Provisions Concerning the Utilisation of International Rivers for other Purposes than Navigation Legislative Texts* U.N. Doc. ST/LEG/SER.B/12 (1974) (United Nations Publication, Sales No. 63 v.4), Texts Treaty No. 114. See also, Convention between the Grand Duchy of Luxembourg and Prussia Concerning the Regulation of Fisheries in Boundary Waters, Nov. 5, 1892, *reprinted in* Martens, G.F., ed., *Noveau Recueil Géneral de Traités*, (Librairie Dieterich, Gottingen 1899), 2nd Series, Vol. XXIV, 153, para. 11.

Contracting Governments which may pollute or cause the deposit of any poisonous, noxious or polluting substances in the waters of the contiguous or successive rivers."[105]

A further set of provisions provide a general obligation to protect waters from pollution. Under the 1958 Treaty concerning the regime of the Soviet-Afghan frontier, "the parties shall adopt the necessary measures to protect the frontier waters from pollution by acids and waste products and from fouling by any other means."[106] The 1956 Convention concerning the canalisation of the Moselle urges that "the parties shall take all measures necessary to protect the waters of the Moselle and its tributaries against pollution."[107] Some agreements are not so strict. Pursuant to the 1960 Indus Treaty, "each party

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[105] Article 30, Agreement between the Belgian Government and the Government of the United Kingdom of Great Britain and Northern Ireland regarding water rights on the boundary between Tanganyika and Ruanda-Urundi, Nov. 22, 1934 (entered into force May 19, 1934), CXC League of Nations Treaty Series 104. *See also,* Convention between the Governments of the Romanian People's Republic, the People's Republic of Bulgaria, the Federal People's Republic of Yugoslavia and the Union of Soviet Socialist Republics concerning fishing in the waters of the Danube, Jan. 29, 1938 (entered into force Dec. 20, 1958), 339 U.N.T.S. 58. Article 7 reads: "The Parties are to work out and apply measures to prevent the pollution of the waters by unclarified sewage and other waste from industrial and municipal undertakings which are harmful to fish, as also measures to regulate blasting operations." Provisions relating to the common frontier between Belgium and Germany, Nov. 6, 1922, *reprinted in* Martens, G.F., ed., *Noveau Recueil Géneral de Traités*, (Librairie Dieterich, Gottingen 1926), 3rd Series, Vol. XIV, 834. Article 2 reads: "No construction, establishment or factory which might pollute the water of the basin with its effluents shall be permitted."

[106] Article 13, Convention between the Governments of the Romanian People's Republic, the People's Republic of Bulgaria, the Federal People's Republic of Yugoslavia and the Union of Soviet Socialist Republics concerning fishing in the waters of the Danube, Jan. 29, 1938 (entered into force Dec. 20, 1958), 339 U.N.T.S. 58.

[107] Article 3, Convention concluded by the Federal Republic of Germany, the French Republic and the Grand Duchy of Luxembourg concerning the canalisation of the Moselle, Oct. 27, 1956 (entered into force Dec. 31, 1956), *reprinted in Legislative Texts and Treaty Provisions Concerning the Utilisation of International Rivers for other Purposes than Navigation Legislative Texts*, U.N. Doc. ST/LEG/SER.B/12 (1974) (United Nations Publication, Sales No. 63 v.4), Treaty No. 123. *See also* Agreement between the Government of the Union of Soviet Socialist Republics concerning the regime of the Finnish-Soviet State frontier, Jun. 23, 1960 (entered into force Oct. 5, 1960), 379 U.N.T.S. 330. Article 15 reads: "The two States are to ensure that the frontier waters are kept clean and are not polluted or fouled in any way."

declares its intention to prevent, *as far as practicable*, undue pollution" [emphasis added].[108]

While the latter agreements dealt with pollution, a discernible shift in emphasis can be seen from protection against pollution, to the protection of the environment and more specifically ecosystems. The shift in emphasis corresponded with the general increase in recognition of the need to protect the environment, particularly from the 1970's onwards. The 1978 Agreement on the Great Lakes is a case in point.[109] Article II states the purpose of the protocol as being "to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem."[110] The 1987 Zambezi Action Plan calls on parties to deal with the water resources and environmental management problems of the river system in a co-ordinated manner to avoid possible future conflicts.[111] While the 1992 UN ECE Helsinki Convention is primarily concerned with transboundary impact, it obliges States to use international watercourses "with the aim of ecologically sound and rational water management, conservation of water resources and environmental protection" and to "ensure the conservation, and where

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[108] Treaty between India and Pakistan regarding the use of the waters of the Indus, Sep. 19, 1960 (entered into force Apr. 1, 1960), 419 U.N.T.S. 125 (1960); Treaty between the Hungarian People's Republic and the Republic of Austria concerning the regulation of water economy questions in the frontier region, Apr. 9, 1956 (entered into force Jul. 31, 1959), 438 U.N.T.S. 6315. "In order to prevent the pollution of frontier waters, the Parties *shall endeavour* to ensure that factories, mines, industrial plants and similar installations, as well as residential communities, drain waste water into the said waters only after suitable purification. They shall take appropriate measures to purify waste water."

[109] Agreement on the Great Lakes Water Quality, Nov. 22, 1978 (entered into force Nov. 22, 1978), 1153 U.N.T.S. 187.

[110] *Id.*

[111] Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System, May 28, 1987 (entered into force May 28, 1987), *reprinted in* 27 I.L.M. 1109 (1998).

necessary, restoration of ecosystems."[112] Numerous non-binding agreements have also advocated the need for protection of the environment of international watercourses regardless of transboundary harm.[113]

The need to protect the environment of an international watercourse is recognised in Article 20 of the 1997 UN Watercourses Convention: "Watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses."[114] Neither the Statement of Understanding nor the 1994 ILC Commentary to the Draft Articles places any qualification on this Article and no reference is made to the need for transboundary harm to occur.[115] The obligation is therefore potentially far reaching, although general.

The ILC Commentary defines "ecosystem" as something narrower then the environment:

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[112] UN ECE Helsinki Convention, *supra* note 6; Moreover, the definition of transboundary impact is relatively wide. *See also* Article 2 of the 2000 Revised SADC Protocol, *supra* note 6; Article 1 of the Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy, Oct. 23, 2000 (entered into force Dec. 22, 2000), OJ (L 327), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_National.html>, (visited Jun. 13, 2003); Article 3 of the Convention on the Protection of the Rhine, Rotterdam, Jan. 22, 1998 (entered into force Apr. 12, 1999), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2003); Article 2 of the Convention for the Establishment of the Lake Victoria Fisheries Organization, Jun. 30, 1994 (entered into force May 24, 1996), *reprinted in* 36 I.L.M. 667 (1997); Article 3 of the Agreements on the Protection of the Rivers Meuse and Scheldt, Apr. 26, 1994, *reprinted in* 34 I.L.M. 851 (1995); Article 3 of the 1995 Mekong Agreement, *supra* note 6; Article 2 of the Danube Convention, *supra* note 6; Preamble 1994 Okavango River Commission, *supra* note 6; Article 1 of the Agreement on joint activities in addressing the Aral Sea and the zone around the Sea crisis, improving the environment, and enduring the social and economic development of the Aral Sea region, Mar. 26, 1993 (entered into force Mar. 26, 1993), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2002).

[113] *See for example* 2001 Bonn Guidelines, *supra* note 36; Agenda 21, *supra* note 29; 1992 Dublin Statement, *supra* note 27; 1977 Mar del Plata, *supra* note 7.

[114] 1997 UN Watercourses Convention, s*upra* note 6.

> "["The Environment"] could be interpreted quite broadly, to apply to areas "surrounding" the watercourses that have minimal bearing on the protection and preservation of the watercourse itself. Furthermore, the term "environment" of a watercourse might be construed to refer only to areas outside the watercourse, which is of course not the intention of the Commission. For these reasons, the Commission preferred to utilise the term "ecosystem" which is believed to have a more precise scientific and legal meaning."[116]

The ILC Commentary goes on to define "ecosystem" as "an ecological unit consisting of living and non-living components that are interdependent and function as a community."[117] While therefore seeking to narrow the scope of the Article 20, the provision remains broad in that it covers not just the water resource *per se,* but all components, living and non-living, interacting with the resource.

The obligation to "protect" the ecosystems of international watercourses is considered by the ILC Commentary to be "a specific application of the requirement contained in Article 5 that watercourses States are to use and develop an international watercourse is manner that is consistent with adequate protection thereof."[118] "Adequate protection" according to the ILC commentary covers "not only measures such as those relating to conservation, security and water-related disease, but also measures of "control" in the technical hydrological sense of the term, such as those taken to regulate flow, to control foods,

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[115] Although McCaffrey, reads it as a due diligence obligation, *supra* note 1.
[116] ILC Commentary to 1994 Draft Articles, *supra* note 6.
[117] *Id.*
[118] ILC Commentary to 1994 Draft Articles, *supra* note 6, at 119.

pollution and erosion, to mitigate drought and to control saline intrusion."[119] The ILC Commentary goes on to explain that the obligation to protect ecosystems "requires that watercourse States shield the ecosystems from a significant threat of harm."[120] A precautionary approach therefore appears to be included in the obligation to "protect" the ecosystems of an international watercourse. The precautionary approach is supported in a number of international watercourse agreements as a guide to State conduct,[121] and is inherent in the obligation to take all appropriate measures to prevent the causing of significant harm.

The obligation to "preserve" the ecosystems of international watercourses is described by the ILC commentary as applying in particular to freshwater ecosystems that are in a "pristine or unspoiled condition." As to the scope of the obligation to preserve international watercourses, the ILC explains that "it requires that these ecosystems be protected in such a way as to maintain them as much as possible in their natural state."[122] What will be possible will depend on the application of the rule of equitable and reasonable use, and the factors and circumstances of a particular case. For example, it

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[119] ILC Commentary to 1994 Draft Articles, *supra* note 6, at 96-98.
[120] ILC Commentary to 1994 Draft Articles, *supra* note 6, at 119.
[121] Article 2(5) of the 1992 UN ECE Helsinki Convention, *supra* note 6, states, *inter alia*, that:

> "… the Parties shall be guided by the following principles …. The precautionary principle, by virtue of which action to avoid the potential transboundary impact of the release of hazardous substances shall not be postponed on the ground that scientific research has not fully proved a causal link between those substances, on the one hand, and the potential transboundary impact, on the other hand."

Article 3(2) of the Agreements on the Protection of the Rivers Meuse and Scheldt, Apr. 26, 1994, *reprinted in* 34 I.L.M. 851 (1995); Article 2(4) of the Convention on the Protection and Sustainable Use of the River Danube, *supra* note 16; Convention on the Protection of the Rhine, Rotterdam, Jan. 22, 1998 (entered into force Apr. 12, 1999), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2003).
[122] ILC Commentary to 1994 Draft Articles, *supra* note 6, at 119.

may be impossible to maintain an ecosystem in its natural state where domestic uses are not being met.[123]

What is considered as "adequate protection" of an international watercourse in line with the rule of equitable and reasonable use is further elaborated by Articles 21 -23 of the 1997 UN Watercourses Convention. Article 21 stipulates that:

> "Watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse." [124]

This provision is clearly linked to the obligation contained in Article 7 not to cause significant harm, and unlike Article 20, is conditional on potential significant harm being caused to other watercourses States. In the use of the word "may" the Article adopts a precautionary approach to transboundary pollution.

Article 22 provides that:

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[123] However, it should be remembered that protection of the ecosystems of international watercourse may directly benefit the poor. Improved conditions in ecosystems of international watercourses can lower flood risk, and improve food availability (through fish stocks). *See* DFID Strategy Paper, *Addressing the Water Crisis – healthier and more productive lives for poor people*, March 2001.

[124] UN Watercourses Convention, *supra* note 6.

> "Watercourses States shall take all measures necessary to prevent the introduction of species, alien or new, into an international watercourse which may have effects detrimental to the ecosystem of the watercourse resulting in significant harm to other watercourse States." [125]

Article 22 adopts a similar precautionary approach to harm in keeping with Article 7 of the 1997 UN Watercourses Convention.

Article 23 reads:

> "Watercourse States shall, individually and, where appropriate, in cooperation with other States, take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment, including estuaries, taking into account generally accepted international rules and standards." [126]

Unlike Articles 21 and 22, Article 23 does not refer to harm that may be caused to other watercourse States but rather, like Article 20, provides a general obligation to protect and preserve the marine environment. The generally accepted international rules and standards referred to include the UN Convention on the Law of the Sea[127] and various regional agreements dealing with land-based pollution of the marine environment.[128]

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[125] UN Watercourses Convention, *supra* note 6.
[126] UN Watercourses Convention, *supra* note 6.
[127] UN Convention on the Law of the Sea, Dec. 10, 1982 (entered into force Nov. 16, 1994), *reprinted in* 21 I.L.M. 1261 (1982).
[128] Protocol on Protection of the Black Sea Marine Environment Against Pollution from Land-based Sources, Apr. 21, 1992 (entered into force Jan. 15, 1994), *reprinted in* 31 I.L.M. 1110 (1993); Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources, May 17, 1980 (entered into force Jun. 17 1983), *reprinted in* 19 I.L.M. 869 (1980); Protocol for the Protection of the

The ILC commentary goes on to explain that "together, protection and preservation of aquatic ecosystems help to ensure their continued viability as life support systems, thus providing an essential basis for sustainable development."[129]

The obligation to adequately protect the aquatic ecosystems of international watercourses finds considerable support in State practice. In some treaties it has been expressed as an obligation to maintain a minimum flow of water of sufficient quality and quantity within an international watercourse in order to safeguard the ecological, chemical and physical integrity of a freshwater ecosystem.[130]

Under Article 4(2)(a) of the 2000 Revised SADC Protocol, "State Parties shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of a

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Marine Environment against Pollution from Land-Based Sources (Kuwait), Feb. 21, 1990 (entered into force Jan. 2, 1993), *reprinted at* <http://sedac.ciesin.columbia.edu:9080/entri/texts/acrc/kuwaitprot.txt.html>. (visited Jun. 3, 2003); Convention for the Protection of Natural Resources and Environment of the South Pacific Region, Nov. 24, 1986 (entered into force Aug. 18, 1990), *reprinted in* 26 I.L.M. 38 (1987); Protocol for the Protection of the South-East Pacific against Pollution from Land-based Sources, Jul. 23, 1983 (entered into force Sep. 23, 1986), *reprinted at* < http://sedac.ciesin.columbia.edu:9080/entri/register/reg-117.rrr.html>, (visited Jun. 3, 2003); Protocol Concerning Pollution from Land-based Sources and Activities to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Oct. 6, 1999 (not yet in force), *reprinted at* <http://www.cep.unep.org/pubs/legislation/lbsmp/final%20protocol/lbsmp_protocol_eng.html>, (visited Jun. 3, 2003); Convention on the Protection of the Marine Environment of the Baltic Sea Area, Apr. 9, 1992 (entered into force Jan. 17, 2000), *reprinted a* 32 I.L.M. 1069 (1992); Convention for the Protection of the Marine Environment of the North East Atlantic, Sep. 22, 1992 (entered into force Mar. 25, 1998), *reprinted in* 32 I.L.M. 1069 (1993); Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, Feb. 14, 1982 (entered into force Aug. 20, 1985), *reprinted at* <http://www.fletcher.tufts.edu/multi/texts/BH811.txt>, (visited Jun. 3, 2003); Convention for the Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, Mar. 23, 1981 (entered into force Aug. 5, 1984), *reprinted in* 20 I.L.M. 746 (1981).

[129] ILC Commentary to 1994 Draft Articles, *supra* note 6, at 119.

[130] Utton, A. & Utton, J., "The International Law of Minimum Stream Flows", 10 Colo. J. Int'l Envt'l L. & Pol'y 7, at 7.

shared watercourse."[131] Inspired by the 2000 Revised SADC Protocol, the 2002 Tripartite Interim Agreement Between Mozambique, South Africa and Swaziland for Cooperation on the Protection and Sustainable Utilisation of the Water Resources of the Incomati and Maputo Watercourses provides in Article 6 that the parties are under an general obligation to "individually and, where appropriate, jointly, take all measures to protect and preserve the ecosystems of the Incomati and Maputo watercourses."[132] Article 9 then elaborates on this provision by providing details pertaining to flow regimes. The Article sets down criteria for the agreed flow regime which is annexed to the Agreement, and includes, *inter alia,* "the need to ensure water of sufficient quantity with acceptable quality to sustain the watercourse and their associated ecosystems."[133] For the Incomati and Maputo Watercourses, Annex I provides interim target flows and key points in the watercourses where there is a need to maintain instream flows. The Tripartiate Permanent Technical Committee (TPTC) responsible for the implementation of the agreement are charged with determining the actual minimum river flows based on the accuracy of the interim target flows, and consistent with the criteria contained in Article 9.

The 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin calls on the State parties to "protect the environment, natural resources, aquatic life and conditions, and ecological balance of the Mekong River Basin from

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[131] Revised SADC Protocol on Shared International Watercourses, *supra* note 6.
[132] Tripartite Interim Agreement Between Mozambique, South Africa and Swaziland for Cooperation on the Protection and Sustainable Utilisation of the Water Resources of the Incomati and Maputo Watercourses, Aug. 29, 2002 (not yet in force), *available at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html> (visited Jun. 13, 2003).
[133] Article 9(3)(b), *id.*

pollution or other harmful effects resulting from any development plans and uses of water and related resources in the basin."[134] In Article 6, States are obliged, except in the case of severe drought, to maintain "acceptable minimum monthly flows" to protect the ecological integrity of the Mekong. The Joint Committee, the implementation body of the Mekong Agreement, is responsible for adopting guidelines for the locations and levels of the flows, monitoring, and taking action necessary for flow maintenance.

A number of agreements imply the need to ensure a certain quality and quantity of water in order to sustain a watercourse and its associated ecosystems.[135] The EU Water Framework Directive for example, seeks to achieve good water status in all EU waters by 2015.[136] Member States are obliged to "protect, enhance and restore" all bodies of surface water and groundwater with the aim of achieving "good" surface water and groundwater status by 2015. Annex V contains criteria for assessing whether waters may be classified as "good". The criteria contained in Annex V requires a certain quality and quantity of water in order to meet the stipulated ecological, chemical and physical criteria. This obligation is however tempered by the number of exceptions

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[134] Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, *supra* note 6.

[135] *See* Convention on the Protection of the Rhine, *supra* note 112; Protocol amending the 1978 Agreement Between the US and Canada on Great Lakes Water Quality, as amended on Oct. 16, 1983 (entered into force Oct. 26, 1989), *reprinted at* http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html> (visited Jun. 12, 2003); Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Oct. 14, 1994 (entered into force Oct. 14, 1994), 1954 U.N.T.S. 3 (1994); U.N. Convention on Biological Diversity, Jun. 5, 1992 (entered into force Dec. 29, 1992), *reprinted in* 31 I.L.M. 822 (1992); Convention on the Protection of the World Cultural and Natural Heritage, Nov. 16, 1972, (entered into force Jul. 1, 1975), 993 U.N.T.S. 243; Convention on Wetlands of International Importance especially as Waterfowl Habitat, Feb. 2, 1971 (entered into force Dec. 21, 1975), 996 U.N.T.S. 245.

[136] Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy, *supra* note 112.

available to Member States with regard to meeting the good water status obligation by 2015.[137]

The 1992 UN ECE Convention on the Protection and Use of Transboundary Watercourses[138] adopts a slightly different approach, but nevertheless obliges Parties to adequately protect the aquatic ecosystem. Article 2(1) stipulates that "the Parties shall take all appropriate measures to prevent, control and reduce any transboundary impact."[139] The Convention goes on to provide that all Parties shall take appropriate measures, *inter alia*, to prevent, control and reduce pollution; aim towards ecologically sound and rational water management; conserve water resources and protect the environment; and ensure conservation and, where necessary, restoration of ecosystems.[140]

The Water Resources Committee of the ILA has proposed Article 18 on Minimum Flows:

> "States shall, acting individually or jointly, and when appropriate with or through competent international organizations, together with or through competent international organizations, take all appropriate measures to ensure stream flows adequate to protect

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[137] *See* Article 4, *id*.
[138] UN ECE Helsinki Convention, *supra* note 6.
[139] UN ECE Helsinki Convention, *supra* note 6. "Transboundary impact" is defined in Article 1(2) as, "any significant adverse effect on the environment resulting from a change in the conditions of transboundary waters caused by a human activity, the physical origin of which is situated wholly or in part within an area under the jurisdiction of a Party, within an area under the jurisdiction of another Party. Such effects of the environment include effects on human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interaction among these factors; they also include effects on the cultural heritage or socio-economic conditions resulting from alterations to those factors."
[140] Article 2(2), UN ECE Helsinki Convention, *supra* note 6.

> the ecological integrity of the waters of the basin, including estuarine and marine waters likely to be affected by activities within a State's jurisdiction or control."[141]

The adequate protection of aquatic ecosystems has been recognised in a number of non-binding international instruments. Agenda 21 sets the objective of maintaining ecosystem integrity, "according to a management principle of preserving aquatic ecosystems, including living resources, and of effectively protecting them from any form of degradation on a drainage basin basis."[142]

The 2002 Johannesburg Plan of Implementation recognised that "human activities are having an increasing impact on the integrity of ecosystems that provide essential resources and services for human well-being and economic activities."[143] The plan goes on to state that "it is necessary to implement strategies which should include targets adopted … to protect ecosystems."[144]

Pursuant to the 2000 Revised Draft International Covenant on Environment and Development includes an Article on Water,

> "Parties shall take all appropriate measures to maintain and restore the quality of water, including atmospheric, marine, ground and surface fresh water, to meet basic human needs and as an essential component of the aquatic system. Parties also shall take all appropriate measures, in particular through conservation and management of water

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[141] ILA Draft Articles, *supra* note 54.
[142] Agenda 21, *supra* note 28.

> resources, to ensure the availability of a sufficient quantity of water to satisfy basic human needs and to maintain aquatic systems."[145]

At the national level, the 1998 South African Water Act introduced the concept of the "Reserve".[146] The "Reserve" is defined in Article 1 of the Act as being, "… the quantity and quality of water required … to protect aquatic ecosystems in order to secure ecologically sustainable development and use of the relevant water resource."[147] Under the South African system water must be allocated, firstly to basic human needs, then to protect ecosystem structure and function, and lastly to meet the requirements of other water users, such as agriculture or industry. The Reserve may vary between water resources depending on the *class* of water in question.[148] Where a water resource is classified as being of high protection status, the Reserve would be set at a high level, which would correspond to the idea of minimum risk and maximum caution. Where the water is designated at a lower class, the Reserve may be set at a level which would still afford protection to the resource, but a greater risk of degradation may be accepted.

A number of western States in the US have adopted the notion of minimum flow doctrine. Utton highlights five strategies that have been adopted in order to implement

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[143] Johannesburg Plan of Implementation, *supra* note 39, para. 23.
[144] *Id*.
[145] IUCN International Covenant, *supra* note 70.
[146] South African Water Act 1998, *available at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_National.html>, (visited Mar. 13, 2003).
[147] *Id.*
[148] Mackay, H., "Moving Towards Sustainability: The Ecological Reserve and its Role in Implementation of South Africa's Water Policy", *available at* <http://www.thewaterpage.com/ecosystems_and_water_law.PDF>, (visited Mar. 13, 2003), at 16.

minimum flow strategies.[149] The first approach is to assign a water right to environmental flows. The Colorado Water Conservation Board has established such rights over 7,000 miles of state streams. A second strategy is to enact legislation, as has happened in California, Oklahoma, Oregon and South Dakota, although this strategy has proved politically difficult. The third strategy is to coordinate water use and release in order to maximise both vested rights and desirable minimum flow. The fourth strategy is acquisition or condemnation, where existing rights are converted to environmental flow. A final strategy is to the use the public trust doctrine to redefine water right in line with the right to minimum flows.

The notion of minimum flows has also gained significant influence in the management of the Murray-Darling River Basin, south-east Australia, as a response to significant ecological degradation over recent years.[150] A community-wide discussion concerning environmental flows is taking place at present. The Ministerial Council of the Murray-Darling River Basin has estimated that $150 million will need to be spent modifying dams, weirs and locks and other measures, to make the best use of water currently available to the environment.[151] In October 2003, the Ministerial Council will consider the outcomes of the community engagement process and the recommendations of the Murray-Darling Basin Commission concerning environmental flows.

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[149] Utton & Utton, *supra* note 130.

[150] Apparently 30-50 percent of wetlands have disappeared, average flows to the sea have fallen by 80 percent, floodplains have contracted due to lack of flooding, and seven native fish species are listed as threatened, *see* Inland Rivers Network, "Environmental flows: present and future", Nov. 18, 1999, *available at* <http://www.nccnsw.org.au/member/wetlands/news/media/19991118_EFpaper.html>, (visited Mar. 13, 2003).

It would appear that from this review of State practice that the protection of the ecosystems of international watercourses is something more than "one factor in the balance of interests" which can be outweighed by other factors.[152] It can be argued that States are, to a certain extent, under an obligation to protect and preserve the ecosystems of an international watercourse - an obligation born out of the need to ensure their continued viability as life support systems. Does such an approach mean that the use of international watercourse for ecological or environmental purposes enjoys priority over other uses of an international watercourse? Is such an approach consistent with the rule of equitable and reasonable use? It would appear that to a certain extent the use of an international watercourse for ecological or environmental purposes does enjoy priority over other uses when failure to afford such priority would threaten the continued viability of an international watercourse as a life support system. Any use of an international watercourse which threatens the watercourses' continued viability or sustainability would be deemed both unreasonable and inequitable. However, beyond the need to protect the continued viability of an international watercourse there could be certain ecological or environmental uses that are inequitable based on competing social or economic uses. Development is not, as Schwabach maintains, prevented at the expense of the

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[151] Murray-Darling Basin Commission, "Environmental Flows and the River Murray", Factsheet No. fslm001, *available at* <http://www.mdbc.gov.au/publications/factsheets/fslm001_101.htm>, (visited Mar. 13, 2003).
[152] Nollkaemper, *supra* note 75, at 63.

environment, but rather environment is protected as the basis for economic and social development.[153]

For example, State A may claim that the use of an international watercourse in State B for industrial purposes altered the water quality in State A, which in turn endangered certain aquatic species downstream. If State B could prove that its use of the watercourse ensured the minimum flow of water of sufficient quality and quantity to safeguard the ecological, chemical and physical integrity of the ecosystem of the international watercourse, then State A's industrial use may, depending on all the factors and circumstances of the case, take precedence over State B's environmental use.

Conclusion

A major strength of the rule of equitable and reasonable use is its flexibility; or its ability to take into account all relevant factors and circumstances when balancing competing interest. However, does the lack of a rigid rule regulating the law of international watercourses mean that States are left with little guidance as to how their competing interest should be reconciled?

On the contrary, this chapter has shown that the rule of equitable and reasonable use has evolved to include important safeguards to protect fundamental interests in international watercourses. The notion of reasonable use enjoys a well established tradition in law as an objective standard, which is flexible enough to be applied consistently in differing

[153] Schwabach, A., "The United Nations Convention on the Law of Non-Navigational Uses of International

situations. Unlike equitable use, determining what might be considered reasonable is not dependent on how an international watercourse is utilised by other States but rather on a contemporary conception of rationality, which both takes into account the special needs of States and the need to protect the long-term viability of international watercourses. While there is no obligation on States to ensure that their use of an international watercourse is reasonable where there is no conflict of uses, by only taking into account reasonable uses when a conflict does arise, a strong incentive is placed on States to ensure that all uses comply with a contemporary conception of rationality.

Where a conflict of (reasonable) uses occurs determining the resolution on the basis of equity provides a mechanism by which all relevant factors and circumstances can be taken into account. While in principle no use enjoys inherent priority, it is evident that vital human needs and the ecosystems of international watercourses will be protected. As to the determining of whether other uses of an international watercourse are equitable, much will depend on the particular factors and circumstances of the case, although the social and economic needs of the States in question and the harm caused by a particular use will be taken into account and weighed accordingly.

The rule of equitable and reasonable use thus provides States with an incentive to ensure that their use of an international watercourse provides the maximum possible benefit while causing the least amount of harm. However, the substantive rule of equitable and

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Watercourses, Customary International Law, and the Interests of Developing Upper Riparians", 33 Tex. Int'l L.J. 257 (1998), at 279.

reasonable use will be heavily reliant on other supporting rules and mechanisms if it is to be successfully applied within the context of international watercourses.

CHAPTER SIX

PROCEDURAL RULES AND MECHANISMS FOR DISPUTE AVOIDANCE AND RESOLUTION

The previous chapter showed how the rule of equitable and reasonable use seeks to balance economic, social and environmental interests within the international watercourse. Is such a rule sufficient in itself to ensure that States reconcile their competing interests in a peaceful manner? How can States agree on what is equitable and reasonable both in the short-term and the long-term? What happens if a significant change in the factors and circumstances, such as a planned use by one State, puts into question what is equitable? How do States know whether other States are utilising an international watercourse in an equitable and reasonable manner? What happens when States disagree as to what is equitable and reasonable?

This chapter will address the above issues by showing that certain procedural rules and mechanisms exist within treaty law and customary international law designed to ensure the effective implementation of the equitable and reasonable use rule. These rules and mechanisms can be broadly classified as "procedural" because they establish steps to be taken in order to make certain that States, regardless of any disagreements or changes in factors and circumstances, utilise their international watercourses in an equitable and reasonable manner.

The basis for all procedural rules and mechanisms is a general obligation on States to cooperate. This obligation can be found in numerous international agreements relating to international watercourses.[1] The 2002 Framework Agreement on the Sava River Basin provides that, "the Parties shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit, and good faith …."[2] Article 1 of the 1994 Mekong Agreement notes that:

> "The Parties agree… to cooperate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin including, but not limited to irrigation, hydro-power, navigation, flood control, fisheries, timber floating, recreation and tourism, in a manner to optimize the multiple-use and mutual benefits of all riparians and to minimize the harmful effects that might result from natural occurrences and man-made activities."[3]

Article 8(1) of the 1997 UN Watercourses Convention provides the basis and objective of cooperation: "Watercourse States shall cooperate on the basis of sovereign equality,

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[1] *See* Article 2 of the Revised Protocol on Shared Watercourses in the Southern African Development Community, Aug. 7, 2000 (not yet in force), *reprinted in* 40 I.L.M; Article 1 of the Agreement between Estonia and Russia on Cooperation in Protection and Sustainable Use of Transboundary Waters, Aug. 20, 1997 (entered into force Aug. 20, 1997), *reprinted at* <http://www.envir.ee/jc/eng/ev_piiriveekogud_eng.php>, (visited Jun. 13, 2003). For a list of international agreements relating to the obligation to cooperation, *see* McCaffrey, S.C., *Third Report on the Law of the Non-navigational Uses of International Watercourses*, [1987] 2(2) Y.B. Int'l L. Comm'n, at 15, UN Doc. A/CN.4/406 and Corr.1, Add.1 and Add.2, at 45-46.

[2] Framework Agreement on the Sava River Basin, Dec. 3, 2002, *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 12, 2003).

[3] Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, Apr. 5, 1995 (entered into force Apr. 5, 1995), *reprinted in* 34 I.L.M. 864 (1995).

territorial integrity, mutual benefit and good faith in order to attain optimal utilisation and adequate protection of an international watercourse."[4]

A number of procedural rules and mechanisms provide the means for promoting dispute avoidance and resolution. The most important procedural rules and mechanism will be discussed in this chapter, these are joint institutions, prior notification and consultation, data and information exchange, compliance and implementation review, and dispute resolution.

6.1 Joint Institutions

Joint institutions are the most appropriate and common institutional structure for States to cooperate over their international watercourses.[5] Special Rapporteur McCaffrey, in his Sixth Report on the Non-Navigational Uses of International Watercourses, wrote that the "management of international watercourse systems through joint institutions is not only

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[4] Convention on the Law of Non-Navigational Uses of International Watercourses, May 21, 1997 (not yet in force), *reprinted in* 36 I.L.M. 700 (1997). The duty to cooperate is reiterated in Article 5(2) of the 1997 UN Watercourses Convention which provides that:

> "Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilise the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention."

More specifically the ILC commentary notes that, "watercourse States have a right to the cooperation of other watercourse States with regard to such matters as flood-control measures, pollution-abatement programmes, drought-mitigation planning, erosion control, disease vector control, river regulation (training), the safeguarding of hydraulic works and environmental protection as appropriate under the circumstances" (Commentary to *Draft Articles on the Law of the Non-navigational Uses of International Watercourses*, *in Report of the International Law Commission on the work of its forty-sixth session*, UN GAOR, 49th Sess., Supp. (No. 10), U.N. Doc. A/49/10 (1994), *reprinted in* [1994] 2(2) Y.B. Int'l L. Comm'n, at 222, at 28).

[5] Mar del Plata Action Plan, "Report of the United Nations Water Conference," Mar del Plata, 14-25, 1977, UN Publications, Sales No. E.77.II.A.12. *See also* Recommendation 48 of *Action Plan on the Human Environment*, June 16, 1972, UN Doc. A/Conf.48/14/Rev.1, *reprinted in* 11 I.L.M. 1421 (1972).

an increasingly common phenomenon, but also a form of co-operation between watercourse States that is almost indispensable if anything approaching optimum utilisation and protection of the system of waters is to be attained."[6] A similar sentiment was voiced by the ILA Water Resources Committee which in 1976:

> "Analysis of Conventional Law, State practice, and of the opinion of most qualified publicists does not seem to provide evidence of the formation of a general international custom obliging States interested in the conservation and development of an international drainage basin to set up joint management agencies. However, the need for an institutionalised co-ordination of competitive and concurrent needs and interests is deeply felt by the international community and is evidenced by the considerable number of agreements concluded in this respect."[7]

Numerous agreements provide for the cooperation of activities concerning international watercourses through joint institutions.[8] The 1998 Convention on the Cooperation for

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[6] McCaffrey, S.C., *Sixth Report on the Law of the Non-navigational Uses of International Watercourses*, [1990] 2(2) Y.B. Int'l L. Comm'n, pt. 2, at 41, UN Doc. A/CN.4/427 and Corr. 1, and Add.1, at para. 7.

[7] ILA Report of the fifty-seventh Conference, Madrid, 1976, *reprinted in* Bogdanović, S., *International Law of Water Resources* – Contribution of the International Law Association (1954-2000) 245 (Kluwer Law International, London 2001), at 19. *See also* McCaffrey, *supra* note 6.

[8] McCaffrey, *supra* note 6, at para. 7. *See for example* the Mekong Agreement, *supra* note 3; Agreement between the Governments of Angola, the Republic of Botswana and the Republic of Namibia on the establishment of a Permanent Okavango River Basin Water Commission (OKACOM), Sep. 15, 1994 (entered into force Sep. 15, 2003), <http://www.fao.org/docrep/W7414B/w7414b0m.htm>, (visited Jun. 13, 2003); Part III of the Convention on the Co-operation for the Protection and Sustainable Use of the Danube River, June 29, 1994 (entered into force Oct. 22, 1998), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2003); Article IV of the Agreement on joint activities in addressing the Aral Sea and the zone around the Sea crisis, improving the environment, and enduring the social and economic development of the Aral Sea region, Mar. 26, 1993 (entered into force Mar. 26, 1993), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2002); Convention on the International Commission for the Protection of the Elbe, Oct. 8, 1990 (entered into force Aug. 13, 1993), *reprinted in* 75 Int'l Envtl. L. 293 (1991); Convention and Statutes relating to the Development of the Chad Basin, May 22, 1964 (entered into force Sep. 15, 1964), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 12, 2003).

the Protection and the Sustainable Use the Waters of the Luso-Spanish River Basins establishes a Conference of the Parties and Commission for the "application and development" of the Convention, with the aim of pursing the objectives of the treaty.[9] The Commission, composed of delegations appointed by each Party, is responsible for the overall interpretation and application of the Convention.[10] The purpose of the Conference of the Parties, composed of representative appointed by the parties, is to meet "to assess and to deliberate upon those matters on which an agreement has not been reached within the Commission."[11]

At the regional level, various instruments seek to promote joint institutions. Within the European context, both the 2000 EU Water Framework Directive, [12] and the 1992 UN ECE Helsinki Watercourses Convention,[13] promote institutional frameworks at the international watercourse level. The EU WFD *obliges* Member States to ensure that the environmental objectives of the EU WFD are coordinated for all international river basins lying within the territory of the EU.[14] Accordingly, Member States "shall together ensure this coordination and may, for this purpose, use existing structures stemming from international agreements."[15] With regard to international river basins stretching beyond the boundaries of the EU, Member States must "endeavour to establish appropriate

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[9] Art. 20 of the Convention on the Co-operation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basins, Nov. 20, 1998, (entered into force Jan. 31, 2000), *reprinted at* <http://faolex.fao.org/faolex/index.htm>, (visited Jun. 13, 2003).
[10] *Id.* Art. 22.
[11] Luso-Spanish River Basins Convention, *supra* note 9, Art. 21.
[12] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, 2000 OJ (L 327) 1.
[13] Convention on the Protection and Use of Transboundary Watercourses, Mar. 17, 1992, (entered into force Oct. 6, 1996), *reprinted in* 31 I.L.M. 1312 (1992).
[14] Article 3 (3) of the EU Water Framework Directive, *supra* note 12.
[15] Article 3 (4) of the EU Water Framework Directive, *supra* note 12.

coordination with the relevant non-Member States, with the aim of achieving the objectives of this Directive throughout the River Basin District."[16] While the latter provisions do not expressly oblige States to set up joint institutions, such institutions might prove indispensable if Member States are to meet the environmental objectives of the Directive.

The 1992 UN ECE Helsinki Convention provides an even clearer commitment to establish joint institutions:

> "The Riparian Parties shall on the basis of equality and reciprocity enter into bilateral or multilateral agreements or other arrangements, where these do not yet exist, or adapt existing ones, where necessary to eliminate the contradictions with the basic principles of this Convention, in order to define their mutual relations and conduct regarding the prevention, control and reduction of transboundary impact." [17]

The Convention goes on to stipulate that "the agreements or arrangements … *shall* provide for the establishment of joint bodies" [emphasis added].[18]

The 2000 Revised SADC Protocol is another example of a regional instrument promoting joint institutions in that, "Watercourse States shall, at the request of any of them, enter into consultations concerning the management of a shared watercourse, which may

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[16] Article 3(5) of the EU Water Framework Directive, s*upra* note 12.
[17] Article 9(1) UN ECE Helsinki Watercourses Convention, s*upra* note 13.
[18] Article 9(2) UN ECE Helsinki Watercourses Convention, s*upra* note 13.

include the establishment of a joint management mechanism."[19] The obligation under the 2000 Revised SADC Protocol is therefore not to establish "joint management mechanisms," but rather to enter into consultations *with a view to* creating such mechanisms.

The 1997 UN Watercourse Convention includes two provisions on joint mechanisms. Article 8(2) recommends that, "watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperate on relevant measures and procedures in the light of experience gained through cooperation in existing joint mechanisms and commissions in various regions."[20] In addition, under Article 24 of the 1997 UN Watercourses Convention:

> "Watercourse States shall, at the request of any of them, enter into consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism;
>
> For the purpose of this article, "management" refers, in particular, to:
>
> (a) Planning the sustainable development of an international watercourse and providing for the implementation of plans adopted; and
> (b) Otherwise promoting the rational and optimal utilisation, protection and control of the watercourse."[21]

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[19] Article 4(2), Revised SADC Protocol, s*upra* note 1.
[20] UN Watercourses Convention, *supra* note 4.
[21] UN Watercourses Convention, *supra* note 4.

Clearly these mechanisms also fall short of imposing an obligation on States to establish joint mechanisms, although there is an obligation to enter into consultations.

The ILA's Campione Consolidation of 1999 includes guidelines on the establishment of an "international watercourse administration", which is defined in Article 45 as "any form of institutional or other arrangement established by agreement among two or more basin States for the purpose of dealing with the conservation, development, and utilisation of the waters of an international drainage basin."[22]

A study of treaty practice and other relevant materials shows that States are not obliged, under general international law, to establish joint institutions relating to their international watercourses. However, it should be noted that, while States have discretion to decide whether or not to establish joint institutions, in many cases such institutions will be the most appropriate mechanisms by which States co-ordinate their activities relating to international watercourses, and also implement the procedural rules and mechanisms outlined in this chapter.

6.2 Duty to Give Prior Notification and Consultation

The purpose of the duty to give prior notification and consultation is to prevent a scenario whereby State A alters its existing use of an international watercourse in a way that

[22] *See* Chapter VIII and Annex A of the Campione Consolidation of the ILA Rules on International Water Resources 1966-1999, *reprinted in* Bogdanović, S., *International Law of Water Resources* – Contribution of the International Law Association (1954-2000) 61 (Kluwer Law International, London 2001), at 72-73, and 78-81, respectively.

threatens State B's right to an equitable and reasonable use of the same watercourse, without State B having the opportunity to consider the change.

The duty to give prior notification and consultation finds support in numerous international agreements relating to international watercourses and is now part of customary international law.[23] The content of the duty finds expression in the 1997 UN Watercourses Convention. Under Article 11 of the UN Watercourses Convention, "Watercourse States shall exchange information and consult each other and, if necessary, negotiate on the possible effects of planned measures on the condition of an international watercourse."[24] Article 11 lays down a general obligation on Watercourse States to notify and consult on *all* possible effects of planned measures on the condition of the international watercourse, regardless of whether such effects are positive or negative. "Measures" are defined as, "including new projects or programmes of a major or minor nature, as well as changes in existing uses of an international watercourse."[25] Article 12 of the 1997 UN Watercourses Convention provides that:

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[23] *See* Article 5 of the Statutes Relating to the Development of the Chad Basin, *supra* note 8; Article 12 of Agreement Concerning the River Niger Commission and the navigation and transport on the River Niger, Nov. 25, 1964 (entered into force Apr. 12, 1966), 587 U.N.T.S. 19; Article 4 of the Convention relating to the status of the Senegal river, Mar. 11, 1972 (entered into force May 25, 1963), *reprinted at* <http://www.fao.org/docrep/W7414B/w7414b07.htm>, (visited Jun. 12, 2003); Article 8 of the Convention for the Protection and Sustainable Use of Shared Waters between Spain and Portugal, Nov. 20, 1998, (entered into force Jan. 31, 2000), *reprinted at* <http://faolex.fao.org/faolex/index.htm>, (visited Jun. 13, 2003); Article 6 of the Agreement (with final protocol) regulating the withdrawal of water from Lake Constance, Apr. 30, 1966 (entered into force Nov. 25, 1967), 620 U.N.T.S. 191; Article 4 of the Convention relating to the creation of the Gambia River basin development organization, Jun. 30, 1978, *reprinted at* <http://www.fao.org/docrep/W7414B/w7414b0c.htm>, (visited Jun. 12, 2003).

[24] UN Watercourses Convention, *supra* note 4.

[25] ILC Commentary to the 1994 Draft Articles, *supra* note 4, at 74.

> "Before a watercourse State implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States, it shall provide those States with timely notification thereof. Such notification shall be accompanied by availability technical data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of planned measures."[26]

The notion of "significant adverse effect" is intended to provide a lower threshold than that of "significant harm."[27] "Available" information is defined as, "relevant data and information as has been developed in relation to the planned measures and is readily accessible." Following a notification procedure laid down in Articles 13-15 of the 1997 UN Watercourses Convention, if a watercourse State deems the planned measures to contravene the substantive provisions of Articles 5-7, then there is, under Article 17, a duty for the State to enter into consultations, and possible negotiations, with a view to arriving at an equitable solution. The obligation to enter into consultations is also widely recognised by States through their international agreements.[28]

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[26] UN Watercourses Convention, *supra* note 4.
[27] ILC Commentary to the 1994 Draft Articles, *supra* note 4, at 76.
[28] Support for the obligation of consultation can be found numerous international watercourse agreements, including Article 5 of the Mekong Agreement, *supra* note 3; Article 10 of UN ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, *supra* note 13; Article 7 of the Agreement Regulating the Withdrawal of the Water From Lake Constance, Apr. 30, 1966 (entered into force Nov. 25, 1967), 620 U.N.T.S. 191; Article 12 of Agreement concerning the River Niger Commission and the navigation and transport on the River Niger, Nov. 25, 1964 (entered into force Apr. 12, 1966), 587 U.N.T.S. 19; Article 4 of the Convention relating to the Senegal River, Mar. 11, 1972 (entered into force May 25, 1963), *reprinted at* <http://www.fao.org/docrep/w7417B/w7414b07.htm>, (visited Jun. 12, 2003); Article 5 of the Statutes Relating to the Development of the Chad Basin, *supra* note 8; Article V of the African Convention on the Conservation of Nature and Natural Resources, Sep. 15, 1968 (entered into force Jun. 16, 1959), 1001 U.N.T.S. 3; Article 5 of the Convention on Wetlands of International Importance especially as Waterfowl Habitat, Feb. 2, 1971 (entered into force Dec. 21, 1975), 996 U.N.T.S. 245; Article 4 of the Agreement Between Niger and Nigeria concerning the Equitable Sharing in the Development, Conservation, and Use of Their Common Water Resources, Jul. 18, 1990, *reprinted at* <http://www.fao.org/docrep/W7414B/w7414b10.htm>, (visited Jun. 12, 2003); Article 7 of the Agreement

Article 12 of the UN Watercourses Convention stipulated that notification should be accompanied by the results of any environmental impacts assessment where available. A number of international watercourse agreements have promoted the use of environmental impact assessments. Article (1)(b) of the 2000 Revised SADC Protocol adopts a similar approach to the 1997 UN Watercourses Convention by providing that notification must be accompanied by available technical data and information, "including the results of any environmental impact assessment."[29] In line with the 1997 UN Watercourses Convention, the obligation here is not one of actually carrying out the environmental impact assessment, but rather of providing other Watercourses States with the results of an environmental impact assessment, if one has been undertaken. A stricter obligation can be found in the 1992 UN ECE Helsinki Convention, which stipulates that:[30]

> "To prevent, control and reduce transboundary impact, the Parties shall develop, adopt, implement and, as far as possible, render compatible relevant legal, administrative, economic, financial and technical measures, in order to ensure, inter alia, that … environmental impact assessment and other means of assessment are applied."

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for General Cooperation between Egypt and Ethiopia, Jul. 1, 1993, *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2003); Article 8 of the Luso-Spanish River Basins Convention, *supra* note 9; Article III of the Treaty between Great Britain and the United States Relating to Boundary Waters, and Questions arising between the United States and Canada, Jan. 1, 1909 (entered into force May 5, 1910), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 12, 2003); Article 18 of the Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System, May 28, 1987 (entered into force May 28, 1987), *reprinted in* 27 I.L.M. 1109 (1998).

[29] Revised SADC Protocol, s*upra* note 1.

[30] UN ECE Helsinki Convention, Article 3(1), *supra* note 13.

The Convention goes on to provide that one of the tasks of the joint bodies required for each international watercourse covered by the Convention will be "to participate in the implementation of environmental impact assessments relating to transboundary waters, in accordance with appropriate international regulation."[31] Pursuant to the 1994 Danube Convention, the contracting Parties shall ensure that "environmental impact assessment in line with supranational and international regulations or other procedures for evaluation and assessment of environmental effects are applied."[32]

The ILA has also proposed the introduction of an obligation on States to carry out environmental impact assessments within their Supplemental Rules on Pollution.[33] Article 3 provides that, "in using the waters of an international drainage basin, States individually or jointly as appropriate shall ensure prior assessment of the impact of programs or projects that may have significant transboundary effect on the environment or on the sustainable use of the waters."[34] It would appear from the study of environmental impact assessment, in chapter four of this thesis,[35] and the State practice relating to international watercourses, that there is an obligation on States to carry out an assessment of activities which may have a significant adverse effect upon other watercourse States.

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[31] UN ECE Helsinki Convention, Article 9(2)(j), *supra* note 13. Within the European context parties to the 1992 UN ECE Helsinki Convention, are likely to apply the provisions contained in the Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991 (entered into force Sept. 10, 1997), *reprinted in* 30 I.L.M. 800 (1991); and Council Directive 85/337 of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment, 1985 O.J. (L 175) 40.
[32] Article 7(5)(f) of the Danube Convention, *supra* note 8.
[33] ILA Report of the Sixty-Seventh Conference, Helsinki, 1996, *reprinted in* Bogdanović, S., *International Law of Water Resources* – Contribution of the International Law Association (1954-2000) 379 (Kluwer Law International, London 2001), at 381.
[34] *Id*.
[35] *Supra* p. 124.

6.3 Duty to Exchange of Data and Information

6.3.1 Duty to Exchange Data and Information between States

The advantages of regular exchange of data and information between States were aptly summed up by Bourne as follows:[36]

> "There are two reasons why it is desirable for states to exchange information about all matters relating to the international drainage basins that they share. In the first place, a drainage basin is a geographical entity and its flowing waters bind states together physically, so that whatever affects the volume or the quality of the waters in one state will often affect it on another, perhaps so minimally that the effect will be imperceptible or perhaps so seriously that it will be disastrous. Co-basin states, then, are interdependent. Since, this is so, it is essential for sound planning of the development of any part of the basin to know both the factors of the natural characteristics of the entire basin and the plans of development that are intended of its other parts. The second reason favouring exchange of information is that knowledge about the basin promotes co-operation between states and thus leads to higher efficiency in the exploitation of the resources of the basin."

Numerous agreements include provisions relating to the exchange of information and data between international watercourse States.[37] In the context of the Mekong Basin,

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[36] Bourne, C.B., "Procedure in the Development of International Drainage Basins: Notice and Exchange of Information," 22 U. Toronto L.J. 172 (1972), *reprinted in* Wouters, P.K., ed., *International Water Law* 143 (Kluwer Law International, London 1997), at 160-161.

[37] *See* Article 6 of the UN ECE Convention, *supra* note 19; Article 4 of the Article 5 of the Convention on Wetlands of International Importance especially as Waterfowl Habitat, Feb. 2, 1971 (entered into force Dec. 21, 1975), 996 U.N.T.S. 245; Article 13 of the Agreement between Portugal, the Mozambique and South Africa relative to the Cahora Bassa Project, May 2, 1984, *reprinted at* <http://www.fao.org/docrep/W7414B/w7414b0i.htm>, (visited Jun. 12, 2003); Article 3 of the Agreement

Procedures for Data and Information Exchange and Sharing have been developed as "an imperative for operationalising an effective, reliable and accessible data and information system for the Mekong River Commission and its member countries to implement the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin."[38] The Procedures define what is meant by data and information,[39] establish basic principles upon which data and information is to be exchanged between the four member countries of the Mekong River Commission,[40] and detail the types of data and information that should be supplied to the Mekong River Commission Secretariat.[41] Responsibility for overseeing the implementation of the procedures is given to the Mekong River Commission Secretariat, who must also report annually to the Member States on the effectiveness of the Procedures.[42]

The 1997 UN Watercourses Convention includes provisions for the exchange of data and information, under Article 9:

Between Niger and Nigeria concerning the Equitable Sharing in the Development, Conservation, and Use of Their Common Water Resources, *supra* note 26; Article II(2) of Convention for the Establishment of the Lake Victoria Fisheries Organization, Jun. 30, 1994 (entered into force May 24, 1996), *reprinted in* 36 I.L.M. 667 (1997); Article VI of the Treaty Between India and Pakistan regarding the use of the waters of the Indus, Sep. 19, 1960 (entered into force Apr. 1, 1960), 419 U.N.T.S. 125 (1960); Article 5(a) of Treaty on the Establishment and Functioning of the Joint Water Commission Between Swaziland and South Africa, Mar. 12, 1992, *reprinted at* <http://www.fao.org/docrep/W7414B/w7414b15.htm>, (visited Jun. 12, 2003); Article 4-5 of the Luso-Spanish River Basins Convention, *supra* note 9; Article 9(j) of the Article 9(j) of the Treaty Between the US and Mexico Relating to the Utilisation of the Water of the Colorado and Tijuana Rivers and of the Rio Grande, Feb. 3, 1944, (entered into force Nov. 8, 1945), *reprinted at* <http://www.internationalwaterlaw.org/>, (visited Jun. 12, 2003); Article VI of the 1977 Agreement Between Bangladesh and India on Sharing of the Ganges Waters at Farakka, Nov. 5, 1977 (entered into force Nov. 5, 1977), *reprinted in* 17 I.L.M. 103 (1978).

[38] Procedures for Data and Information Exchange and Sharing, Nov. 1, 2001 (entered into force Nov. 1, 2001), *reprinted at* <http://www.mrcmekong.org/>, (visited Oct. 16, 2003).

[39] *Id.* Article 1.

[40] Mekong Procedures, *supra* note 36, Article 3.

[41] Mekong Procedures, *supra* note 36, Article 4.

"(1) … watercourse States shall on a regular basis exchange readily available data and information on the condition of the watercourse, in particular that of a hydrological, meteorological, hydrogeological and ecological nature and related to the water quality as well as related forecasts.

(2) If a watercourse State is requested by another watercourse State to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information.

(3) Watercourse States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner which facilitates its utilization by the other watercourse States to which it is communicated."[43]

The scope of Article 9 covers natural conditions of the watercourse as well as the impact of past and present human activities on natural conditions.[44] "Regular" exchange of data and information is considered to be "an ongoing and systematic process" of exchange, with the ILC commentary encouraging, but not obliging, watercourse States to use existing or new joint mechanisms for the purpose.[45] In relation to "readily available" information, the Commentary to Article XXIX of the Helsinki Rules notes that, "…the basin State in question cannot be called upon to furnish information which is not

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[42] Mekong Procedures, *supra* note 36, Article 5.
[43] UN Watercourses Convention, *supra* note 4.
[44] Tanzi, M. & Tanzi, A., *The United Nations Convention on the Law of International Watercourses – A Framework for Sharing* (Kluwer Law Int, The Hague 2001), at 195.

pertinent and cannot be put to the expense and trouble of securing statistics and other data which are not already at hand or readily obtainable."[46] A further limit is provided by Article 31 of the 1997 UN Watercourses Convention exempting "data or information vital to [a watercourse States'] defence or security" from the provisions.[47]

6.3.2 Public Access to Information

While the exchange of data and information between States can be said to be a well-established rule of customary international law, a recent development which is gaining growing support in treaty practice is the public right of access to information relating to international watercourses. Providing a public right of access to information relating to international watercourses can be an important first step in ensuring public participation in regulation of international watercourses.[48] The benefit of public participation in international watercourses was described in Article 5(i) of the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, as follows:

> "Access to information and public participation in decision making concerning water and health is needed, inter alia, in order to enhance the quality and the implementation of the decisions, to contribute to public awareness of issues, to give the public the opportunity to express its concerns and to enable public authorities to take due account of such concerns.

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[45] ILC Commentary to the 1994 Draft Articles, s*upra* note 4, at 65.
[46] *Helsinki Rules on the Uses of the Waters of International Rivers,* adopted by the ILA at the 52nd Conference, Helsinki, Finland, Aug. 1966*, reprinted in* Bogdanović, S., *International Law of Water Resources – Contribution of the International Law Association (1954-2000)*, 89 (Kluwer Law International, The Hague 2001), at 133.
[47] UN Watercourses Convention, *supra* note 4.

> Such access and participation should be supplemented by appropriate access to judicial and administrative review of relevant decisions."[49]

Under the 1992 UN ECE Helsinki Convention riparian parties must ensure that "information concerning the conditions of the transboundary waters, measures taken or planned to be taken to prevent, control and reduce transboundary impact, and the effectiveness of those measures, is made available to the public."[50] The 1999 Protocol on Water and Health also requires Parties to provide the public with information, *inter alia*, on the establishment of water management plans and targets for protection against water-related diseases.[51] Information is also required on surveillance and early-warning systems and contingency plans, and the promotion of public awareness, education, training, research and information relating to water and health issues.[52]

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[48] See previous discussion in Chapter Four of this thesis, at *supra* pp. 128-135; and Woodhouse, M., "Is Public Participation a Rule of the Law of International Watercourses", 43 Nat. Resources J. 137 (2003).

[49] Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, June 17, 1999 (not yet in force), *reprinted at* <http://www.unece.org/env/water/text/text_protocol.htm>, (visited Jun. 13, 2003). The importance of public participation was also recognised in Principle 2 of *Dublin Statement on Water and Sustainable Development*, Dublin, Ireland, Jan. 31, 1992, *reprinted in* 22 Envtl. Pol'y and Law 54 (1992), "Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels." The Dublin Statement went on to note that: "The participatory approach involves raising awareness of the importance of water among policy-makers and the general public. It means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects."[49] Principle 3 of Dublin also recognised the need to "equip and empower women to participate at all levels in water resource programmes, including decision-making and implementation," given the fact that "women play a central part in the provision, management and safeguarding of water."[49] Similarly, paragraph 18.9(c) of Agenda 21 provides that the design, implementation and evaluation of integrated water resources management plans should be, "based on an approach of full public participation, including that of women, youth, indigenous people and local communities in water management policy-making and decision-making."

[50] UN ECE Helsinki Convention, Article 16(1), *supra* note 13.

[51] Protocol on Water and Health, Article 10(1), *supra* note 47.

[52] *Id.*

In the context of the EU Water Framework Directive, the type of information provided involves that required in order for the public to participate in the production of River Basin Management Plans.[53] Pursuant to Article 14 of the EU Water Framework Directive, Member States shall ensure that the following information is made available: a timetable and work programme for the production of the plan; an interim overview of the significant water management issues identified in the river basins; draft copies of the River Basin Management Plan; and any background documents and information used for the development of the River Basin Management Plan.[54]

The mode of access to information may vary from the minimum of allowing interested parties access to information upon a request, to notification, publication or even sending information to interested parties. The 1992 UN ECE Convention merely demands that information should be made available free of charge, at all reasonable times, and copies should be permitted upon payments of reasonable charges.[55] The 1999 Protocol on Water and Health goes further by obliging the parties to actually publish specific information or documents relating to, *inter alia*, national and local targets,[56] progress made in achieving those targets,[57] and the results of the collection and evaluation of data.[58] Similarly, the EU WFD Directive requires Member States to publish the relevant information.[59]

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[53] EU Water Framework Directive, *supra* note 12.
[54] *See also* Article 14 of the Danube Convention, *supra* note 8, "(1) The Contracting Parties shall ensure that their competent authorities are required to make available information concerning the state or the quality of riverine environment in the Danube Basin to any natural or legal person."
[55] Protocol on Water and Health, Article 16(2), *supra* note 47.
[56] Protocol on Water and Health, Article 6(2), *supra* note 47.
[57] Protocol on Water and Health, Article 7(4), *supra* note 47.
[58] Protocol on Water and Health, Article 7(2), *supra* note 47.

Access to certain information may be denied. Under Article 8 of the 1992 UN ECE Helsinki Convention, "the provisions of this Convention shall not affect the rights or the obligations of Parties in accordance with their national legal systems and applicable supranational regulations to protect information related to industrial and commercial secrecy, including intellectual property or national security."[60] The 1999 Protocol on Water and Health provides greater detail on limitations. Article 10(4) denies an obligation on parties to provide information, which a public authority does not hold; the request is manifestly unreasonable or formulated in a too general a manner; the information concerns material in the course of completion, or international communications protected by national law or customary practice.[61] Moreover, specific types of information may be denied access to, such as information that would adversely affect, the confidentiality of proceedings of public authorities; international relations, national defence or public security; the course of justice; the confidentiality of commercial and industrial information; intellectual property rights; and confidentiality of personal data.[62]

Providing public access to information is clearly a growing trend found in a growing number of treaties relating to international watercourses. While the provisions established in most treaties fall short of obliging States to provide public access to information, this growing trend can be seen as a positive step forward in promoting cooperation between States over international watercourses. Public access to

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[59] EU Water Framework Directive, *supra* note 12.
[60] UN ECE Helsinki Convention, *supra* note 13.
[61] Protocol on Water and Health, *supra* note 47.

information is also an important element of any implementation and compliance review mechanisms.

6.4 Compliance Strategy

Implementation and compliance review mechanisms are a relatively recent development in treaty practice pertaining to international watercourses. Such mechanisms focus on verifying whether States have implemented and are complying with their treaty commitments. The procedures and mechanisms already mentioned in this chapter form an important part of any implementation and compliance review mechanism and will therefore be indispensable in ensuring that international agreements are fully implemented.

Under the 1999 London Protocol on Water and Health, the Parties agree to review the compliance of the Parties with the Protocol on the basis of the reviews and assessments detailed in the Protocol itself.[63] Pursuant to Article 15, "multilateral arrangements of a non-confrontational, non-judicial and consultative nature for reviewing compliance shall be established by the Parties….These arrangements shall allow for appropriate public involvement."[64] Pursuant to various discussions in the Meeting of the Parities,[65] it is

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[62] Protocol on Water and Health, Article 10(5), *supra* note 47. The 1994 Danube Convention provides for similar exemptions in Article 14(3), *supra* note 8.
[63] Protocol on Water and Health, Article 15, *supra* note 42.
[64] Protocol on Water and Health, *supra* note 42.
[65] Meeting of the Parties to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Working Group on Legal and Administrative Aspects, 29-30 Jan. 2001, Geneva, UN Doc. MP.WAT/WG.3/2001/1, 19 Dec. 2000, *available at* <http://www.unece.org/env/documents/2001/wat/wg.3/mp.wat.wg.3.2001.1.e.pdf>, (visited Oct. 16, 2003), at 3-4; UN ECE, WHO Meeting of the Parties to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Working Group on Water and Health, Report of First Meeting, Budapest, 14-15 May 2001, UN Doc. MP.WAT/WG.4/2001/2, 28 Aug. 2001,

likely that the Contracting parties to both the UN/ECE Watercourses Convention and the Protocol on Water and Health will be based on the Geneva Strategy and Framework for Monitoring Compliance with Agreements on Transboundary Waters.[66] The Geneva Strategy calls for, *inter alia,* a compliance information system (monitoring, reporting, review and evaluation), and a compliance review system (regular meetings, positive incentive programmes, public participation, and non-confrontational compliance review responses).[67]

Another provision calling for the implementation and compliance review mechanisms can be found in the Framework Agreement on the Sava River Basin.[68] Under Article 21, "Monitoring Implementation of the Agreement", "the Parties agree to establish a methodology of permanent monitoring of implementation of the Agreement and activities based upon it."[69] Such a methodology should, according to Article 21(2), include provisions for providing "stakeholders and the general public" with access to relevant information.[70]

<http://www.euro.who.int/document/WSN/WatProt/wgwh1min.pdf>, (visited 16 Oct. 2003), at 4; UN ECE, WHO Meeting of the Parties to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Working Group on Water and Health, Report of Second Meeting, Budapest, 28-29 Oct. 2002, <http://www.euro.who.int/document/E78015.pdf>, (visited 16 Oct. 2003), at 14.

[66] *See* UNECE, UNEP Network of Expert on Public Participation and Compliance, *Water Management: Guidance on public participation and compliance with agreements*, Geneva, March 2000, UN Doc. MP.WAT/2000/5, Dec. 17, 1999, <http:// http://www.dundee.ac.uk/law/iwlri/index.php>, (visited 16 Oct. 2003).

[67] *Id.*

[68] Framework Agreement on the Sava River Basin, *supra* note 2.

[69] Framework Agreement on the Sava River Basin, Article 21(1), *supra* note 2.

[70] Framework Agreement on the Sava River Basin, Article 21(1), *supra* note 2.

A number of international agreements make joint institutions responsible for monitoring the implementation of the agreement. Under the Rhine Convention, the Contracting Parties must regularly report to the Rhine Commission, "on legislative, regulatory or other measures taken with a view to implementing the rules of the Convention and the decisions of the Commission."[71] Likewise, under the Danube Convention, Contracting Parties are obliged to report to the International Danube Commission certain matters relating to the Convention.[72] The Revised SADC Protocol also encourages an element of reporting in Article 5(2)(a), where the Committee of Water Ministers, established under the Agreement, "oversee and monitor the implementation of the Protocol" and "provide regular updates to the Council on the status of the implementation of the Protocol." Reporting requirements are provided for in the EU Water Framework Directive, whereby Article 15 obliges Member States to report on various aspects of the implementation of the EU Water Framework Directive to the Commission.[73]

Given that public participation is an important element of ensuring compliance and implementation of international agreements, it is comforting to see that some treaties include provisions of public participation in decision making procedures. An example of a provision that encourages public participation is the 1999 Protocol on Water and Health. Pursuant to Article 6(1) of the Protocol, in establishing and revising local and national targets for the protection against water related diseases, the parties shall "make appropriate practical and/or other provisions for public participation, within a transparent

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[71] Convention on the Protection of the Rhine, Rotterdam, Jan. 22, 1998 (entered into force Apr. 12, 1999), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 13, 2003), Article 11(3)(a).
[72] Danube Convention, Article 10, *supra* note 8.

and fair framework, and shall ensure that due account is taken of the outcome of the public participation."[74] Article 16(3)(g) goes on to require that at the meeting of the parties States shall "consider the need for further provisions on …public participation in decision-making."[75]

Other provisions recommend public participation in decision making. Article 14(1) of the EU Water Framework provides that "Member States *shall encourage* the active involvement of all interested parties in the implementation of this Directive, in particular in the production, review and updating of the River Basin Management Plans" [emphasis added].[76] Under the 1997 Estonian-Russian Agreement for the Protection and Sustainable Use of Transboundary Waters, "the Parties *encourage* co-operation between agencies of executive power, local self-governments, scientific and public interests organisations, as well as other institutions in the field of sustainable development and protection of transboundary waters" [emphasis added].[77] Pursuant to the Declaration on the Green Corridor of the Danube the parties, "*recognise* the crucial role of environmental Non-Governmental Organisations in the expression of public interests and ideas in a democratic framework and to offer citizens and environmental NGOs the opportunity to play an active role in decision making processes" [emphasis added].[78]

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[73] EU Water Framework Directive, *supra note* 12.
[74] Protocol on Water and Health, *supra* note 42.
[75] Protocol on Water and Health, *supra* note 42.
[76] EU Water Framework Directive, *supra* note 12.
[77] Agreement Between Estonia and Russia, *supra* note 1.
[78] *Declaration on the Co-operation for the Creation of a Lower Danube Green Corridor*, Bucharest, Romania, Jun. 5, 2000, *reprinted at* <http://www.ramsar.org/key_danube_corridor.htm>, (visited Jun. 13, 2003).

Various legal instruments provide for public participation in the decision making procedures of joint mechanisms. Article 14 of the Rhine Convention permits the International Commission for the Protection of the Rhine to recognise as observers, "non-governmental organisations, in so far as their field of interest or activities are relevant."[79] While this provision does not actually oblige the Commission to recognise NGO's as observers, the Commission must exchange information and consult NGO's before discussing decisions liable to have an important impact.[80] The Commission must also inform the NGO's as soon as a decisions has been taken.[81] Observers are entitled to submit to the Commission any relevant information or reports.

Compliance and implementation mechanisms, or elements thereof, such as public participation, are increasingly being recognised as an important means for implementing substantive rules governing international watercourses. Such mechanisms are aimed at avoiding disputes arising between States by promoting a high level of cooperation both between the States themselves, and between the States and other parties. However, in a minority of cases where disputes over the application or interpretation treaty provisions exist, there is a need for dispute resolution mechanisms.

6.5 Dispute Resolution

In the majority of cases States will implement international agreements without serious problems arising. However, mechanisms must be in place where, in the minority of cases

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[79] Article 14(2)(c) of the Rhine Convention, *supra* note 69.
[80] Article 14(3), of the Rhine Convention, *supra* note 69.
[81] Article 14(3), of the Rhine Convention, *supra* note 69.

disputes arise over the interpretation and application of treaty provisions.[82] Where a dispute arises over the interpretation or application of a treaty relating to an international watercourse it may be possible to resolve the dispute through two broad channels - private remedies, or State-State dispute settlement mechanisms.

6.5.1 Private Remedies

Resort to the right of access to administrative and judicial proceedings within the context of international watercourses has the advantage of preventing disputes escalating to the inter-State level, where they may easily be politicised;[83] it also acknowledges the fact that the majority of transboundary disputes result from the actions of private parties.[84] Compared to using diplomatic channels, seeking private law remedies will also tend to result in a speedier conclusion.[85]

In relation to private remedies, an established principle of the law of international watercourses is that of non-discrimination. The principle of non-discrimination can be found in the 1909 Boundary Water Treaty, wherein Article 2 states that:

> "any interference with or diversion from their natural channel of such waters on either side of boundary, resulting in any injury on the other side of the boundary, shall give rise

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[82] *See generally* Vinogradov, S., Wouters, P. & Jones, P., Transforming Potential Conflict into Cooperation Potential: The Role of International Water Law, <http://webworld.unesco.org/water/wwap/pccp/cd/role.html>, (visited Oct. 25, 2003), at 26 – 35.
[83] McCaffrey, *supra* note 6, para. 39.
[84] ILA Articles on Private Law Remedies for Transboundary Damage to International Watercourses, Report of the sixty-seventh Conference, Helsinki , 1996, *reprinted in* Bogdanović, S., *International Law of Water Resources* – Contribution of the International Law Association (1954-2000) 372 (Kluwer Law International, London 2001) at 372.
[85] McCaffrey, *supra* note 6.

> to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs." [86]

A similar approach is adopted by the 1997 UN Watercourses Convention recognised, which stipulates under Article 32 that:

> "Unless the watercourse States concerned have agreed otherwise for the protection of the interests of persons, natural or judicial, who have suffered or are under a serious threat of suffering significant transboundary harm as a result of activities related to an international watercourse, a watercourse State shall not discriminate on the basis of nationality or place where the injury occurred, in granting to such persons, in accordance with its legal system, access to judicial or other procedures, or a right to claim compensation or other relief in respect of significant harm caused by such activities carried on in its territory." [87]

The right to non-discrimination does not in itself guarantee a right of access to administrative and judicial proceedings. Instead, the right to non-discrimination requires that where a right in national law exists, watercourse States can not discriminate on the basis of nationality or place where the injury occurred. A further point to note is that Article 32 is restricted to circumstances where there has been, or there is a serious threat of, significant transboundary harm. The use of the phrase, "unless the watercourse States concerned have agreed otherwise," permits watercourse States to agree not to provide the right of access to judicial and administrative proceedings to individuals.

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[86] Treaty between Great Britain and the United States Relating to Boundary Waters, and Questions arising between the United States and Canada, Jan. 1, 1909 (entered into force May 5, 1910), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html>, (visited Jun. 12, 2003).

However, the watercourse States will still be under an obligation to protect the interests of persons.[88] States may therefore agree to address the issue at the State-State level.[89]

It is difficult to find water specific international agreements that guarantee a right of access to administrative and judicial proceedings. Perhaps the closest example is the 1999 Protocol on Water and Health, which provides in Article 5(i) a general obligation that "access [to information] and [public] participation should be supplemented by appropriate access to judicial and administrative review of relevant decisions."[90]

The work of the ILA has considered the right of access to administrative and judicial proceedings at various occasions. Article 8 of the Rules on Water Pollution reads:

> "States should provide remedies for persons who are or may be adversely affected by water pollution in an international drainage basin. In particular, States could, on a non-discriminatory basis, grant these persons access to the judicial and administrative agencies of the State in whose territory the pollution originates, and should provide, by agreement or otherwise, for such matters as the jurisdiction of courts, the applicable law, and the enforcement of judgements." [91]

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[87] UN Watercourses Convention, s*upra* note 4.
[88] ILC Commentary to 1994 Draft Articles, *supra* note 4, at 132
[89] ILC Commentary to 1994 Draft Articles, *supra* note 4, at 132.
[90] Protocol on Water and Health, *supra* note 42.
[91] ILA, Report of the Sixtieth Conference, Montreal, 1982, reprinted in Bogdanović, S., *International Law of Water Resources* – Contribution of the International Law Association (1954-2000) 313 (Kluwer Law International, London 2001), at 324.

The ILA Campione Consolidation develops the right of access to administrative and judicial proceedings based on the 1996 Articles on Private Law Remedies for Transboundary Damage to International Watercourses.[92] Article 51(1) lays down a minimal standard for individuals seeking redress by providing that, "States, individually or jointly, shall ensure the availability of prompt, adequate and effective administrative and judicial remedies for persons in another State who suffer or may suffer substantial damage arising from the inequitable or unreasonable use of the waters of an international drainage basin in their territories."[93] Article 52(1) of the Campione Consolidation goes further by providing right of access to the following administrative and judicial procedures:[94]

> "(a) to participate in any environmental impact assessment procedure;
>
> (b) to institute proceedings before an appropriate court or administrative authority of that other State in order to determine whether the damaging use or activity should be permitted;
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> (c) to obtain preventive remedies;
>
> (d) to obtain compensation; and
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> (e) to obtain information necessary for the above purposes."

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[92] Campione Consolidation, *supra* note 21, at 73-74.
[93] *Id.*
[94] Campione Consolidation, *supra* note 21, at 73-74.

Article 52(2) provides for a right of public bodies and NGOs established in a State, "which are or may be affected by damage," to initiate proceedings or participate in procedures in the other State.[95]

The study of treaty practice and other relevant materials testifies to the fact that the right to private access to information is not a binding obligation under customary international law, but it may provide a useful means of resolving disputes over international watercourses. However, where disputes are unable to be resolved through private remedies, or States are unwilling to rely on this method of dispute resolution, a number of other options are available to States in order to peacefully resolve their disputes,

6.5.2 Peaceful Settlement of Disputes Between States

States are at liberty to resolve their disputes over international watercourses by any *peaceful* means they deem fit.[96] The discretion afforded States is reflected in the wide range of dispute resolution mechanisms that have been utilised.

A common practice is for States to refer their disputes to a pre-established joint commission.[97] Under the 1960 Indus Water Treaty, "any questions concerning the

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[95] Campione Consolidation, *supra* note 21, at 73-74.

[96] *See* Wouters, P.K., "Universal and Regional Approaches to Resolving International Water Disputes: What Lessons Learned from State Practice?", *in* The International Bureau of the Permanent Court of Arbitration, ed., *Resolution of International Disputes* (Kluwer Law International, The Hague 2002). Article 2(3) of the UN Charter provides that, "all Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered." Similarly, Article 33(1) of the UN Watercourses Convention, *supra* note 4, provides that "in the event of a dispute between two or more Parties concerning the interpretation or application of the present Convention, the Parties concerned shall, in the absence of an applicable agreement between them, seek a settlement of the dispute by peaceful means"

interpretation or application of the Treaty or the existence of any contentious fact" are to be referred to the Permanent Indus Commission.[98] Article VIII of the Indus Water Treaty stipulates that India and Pakistan each appoint a commissioner and the two commissioners make up the Commission. The 1909 Boundary Waters Treaty between Canada and the US provides that, "any questions or matters of differences involving the rights, obligations, or interest of either in relation to the other or to the inhabitants of the other, along the common frontier between the US and Canada, be referred to the International Commission for examination and report upon the request of either Contracting party."[99] Under Article VII of the 1909 Boundary Waters Treaty the contracting parties establish an International Joint Commission of the US and Canada composed of three commissioners appointed by the US and three appointed by Canada.

In cases where no permanent joint commission exists, or where a joint commission is unable to resolve the dispute, States may elect to resolve their disputes by negotiation or

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[97] *See for example* Article 17(1) of the 1990 Agreement between and Niger concerning the Equitable Sharing in the Development, Conservation and Use of their Common Water, *supra* note 26, referring disputes to the Nigeria-Niger Joint Commission for Cooperation; Article 9(3)(e) of the Treaty Concerning the Integrated Development of the Mahakali River, Feb. 12, 1996 (entered into force Jun. 5, 1997), *reprinted in* 36 I.L.M. 533 (1997), referring "any differences arising between the Parties concerning the interpretation and application of the Treaty" to the Mahakali River Commission; Article 18(c) and 24(f) of the 1995 Mekong Agreement, *supra* note 3, charges the Mekong River Basin Commission with the task of resolving disputes between States; and Article 24(d) the 1944 Treaty Between the US and Mexico Relating to the Utilisation of the Water of the Colorado and Tijuana Rivers and the Rio Grande, Feb. 3, 1944, (entered into force Nov. 8, 1945), *reprinted at* <http://www.internationalwaterlaw.org/>, (visited Jun. 12, 2003), provides that, the International Boundary and Water Commission shall have the power to, "settle all differences that may arise between the two Governments with respect to the interpretation or application of [the] Treaty, subject to the approval of the two Governments"; Article XXXI of the Helsinki Rules, *supra* note 44, provides that: "if a question or dispute arises which relates to the present or future utilisation of the waters of an international drainage basin, the basin states should refer the question or dispute to a joint agency and request the agency to survey the international drainage basin and to formulate plans or recommendations for the most efficient use thereof in the interests of all the states concerned."

[98] Indus Water Treaty, *supra* note 35, Article IX(1).

[99] Indus Water Treaty, *supra* note 35, Annex IX.

other diplomatic measures.[100] Dispute resolution measures other than negotiation may include third party intervention in the shape of good offices[101], mediation[102] or conciliation[103]. Article 26 of the Convention on the Cooperation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basins reads, "Parties should initially seek a solution to a dispute through "negotiation or through any other diplomatic means."[104] In the same way, Article 35 of the 1995 Mekong Agreement recognises that where a dispute can not be resolved through the Mekong Commission it shall be referred to the respective Governments to resolve it by, "negotiation through diplomatic channels."[105]

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[100] *See for example* Article 22(1) of the Framework Agreement on the Sava River Basin, *supra* note 2; Article 14 of Agreement Between Estonia and Russia *supra* note 1; Article IX of the 1960 Indus Water Treaty, *supra* note 35; Article 16(2) of the Rhine Convention, *supra* note 69; Article 13(a) of the 1995 Agreement for the Development of the Upper Basin of the Bermejo River and Grande de Tarija River; Article 24(1) of the 1994 Danube Convention, *supra* note 8; Article 15(1) of the Tripartite Interim Agreement Between Mozambique, South Africa and Swaziland for Cooperation on the Protection and Sustainable Utilisation of the Water Resources of the Incomati and Maputo Watercourses, Aug. 29, 2002 (not yet in force), *reprinted at* <http://www.dundee.ac.uk/law/iwlri/Research_Documents_International.html> (visited Jun. 13, 2003); Article XXII of the 1994 Convention for the Establishment of the Lake Victoria Fisheries Organisation, *supra* note 35; Article 7(4) of the OKACOM Agreement, *supra* note 8; Article XXX 1966 Helsinki Rules, *supra* note 44.

[101] "Good offices" involves a third party acting as a "go-between" in order to facilitate negotiation between the States at dispute, *see* Vinogradov, *supra* note 80, at 28.

[102] "Mediation" is a more active pursuit than "good offices" whereby the third party takes an role in negotiating a resolution to the dispute, *see* Vinogradov, *supra* note 80, at 28-29.

[103] "Conciliation" is one step further than mediation in that the third party will help disputing States resolve their differences by examining the facts and coming up with recommendations on how the parties should resolve the dispute, *see* Vinogradov, *supra* note 80, at 30-31. Article 33(2) of the UN Watercourses Convention, *supra* note 4, provides that "if the Parties concerned cannot reach agreement by negotiation requested by one of them, they may jointly seek the good offices of, or request mediation or conciliation by, a third party." Article XXXII of the Helsinki Rules, *supra* note 44, also makes reference to good offices, mediation and conciliation.

[104] Luso-Spanish River Basins Convention, *supra* note 9.

[105] Mekong Agreement, *supra* note 3.

Where a dispute is of a technical nature, a further option available to States is to refer the disagreement to an *ad hoc* fact finding commission.[106] Article 26(2) of the 1998 Convention on the Cooperation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basins stipulates that if a dispute is of a predominately technical nature it should be referred to an "inquiry commission".[107] Under Article 22(3) of the 2002 Framework Agreement on the Sava River Basin any Party may request that an "independent fact-finding expert committee", consisting of one expert chosen by each party and a third neutral expert, be established.[108] Article 33(3) of the 1997 UN Watercourses Convention provides that where States have not been able to resolve a dispute within six months from the time of the request for negotiations the dispute *shall* be submitted, at the request of any of the parties to the dispute, to impartial fact-finding. Pursuant to Article 3(4) a fact-finding Commission is to be composed of one member nominated by each Party concerned and an additional member who is not a national of any of the Parties concerned, who shall serve as Chairman. The Commission adopts its report based on information it has requested from the Parties, setting forth its findings and the reasons thereof and such recommendations as it deems appropriate for an equitable solution to the dispute.[109]

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[106] *See for example* Article IX(2)(a) and Annexure F of the 1960 Indus Water Treaty, *supra* note 35, which makes references to a "neutral expert" to resolve technical questions.
[107] Luso-Spanish River Basins Convention, *supra* note 9.
[108] Framework Agreement on the Sava River Basin, *supra* note 2.
[109] UN Watercourses Convention, Article 33(8), *supra* note 4.

A further mechanism available to States to resolve their disputes, normally where diplomatic means fail, is to submit the dispute to arbitration.[110] In some circumstances the parties may appoint the members of an arbitral court. In the 1998 Convention on the Cooperation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basin the arbitral court is made up of three arbitrators, each party appointing one arbitrator, and the two choosing a third.[111] In other agreements provision is made for the dispute to be resolved through an existing arbitral court, such as the International Court of Justice.[112] Under the Luso-Spanish Convention a dispute *must* be submitted to an arbitral court if unresolved within a year, or upon the request of one of the parties involved.[113] In other cases, such as the 2002 Framework Agreement on the Sava, it may be discretionary whether parties refer a dispute to arbitration.[114]

Conclusion

The 2001 Bonn International Conference on Freshwater concluded that, "the essential key [to addressing the world's water crisis] is stronger, better performing governance

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[110] *See* Article 33 and the Appendix of the 1997 UN Watercourses Convention, *supra* note 4; Article 17(2) of the 1990 Nigeria and Niger Agreement, *supra* note 26; Article 22(2) of the 2002 Framework Agreement on the Sava River Basin, *supra* note 2.

[111] Luso-Spanish River Basins Convention, Article 26(3), *supra* note 9. *See also* Article IX(5) and Annex G of the 1960 Indus Treaty, *supra* note 35; Annex to the 1998 Rhine Convention, *supra* note 69; Article 11(2) of the Mahakali Treaty, *supra* note 95; Article XXII of the 1994 Convention for the Establishment of the Lake Victoria Fisheries Organisation, *supra* note 35.

[112] *See* Article 24(2)(a) of the Danube Convention, *supra* note 8; Article 22(2) of the 2002 Framework Agreement on the Sava River Basin, *supra* note 2.

[113] Luso-Spanish River Basins Convention, Article 26(3), *supra* note 9. Similarly, under Article 11(1), the 1997 Mahakali Treaty, *supra* note 95, a dispute "shall be submitted" to arbitration if parties are unsatisfied with the outcome of the Mahakali River Commission., and under Article 24(2)(a) if the Contracting parties are unable to resolve a dispute by diplomatic means within a reasonable time then the dispute will be submitted for compulsory decision of either the ICJ or arbitration. *See also* Article 15(2) of the Tripartite Interim Agreement of the Incomati and Maputo, *supra* note 98; Article XXII of the Convention for the Establishment of the Lake Victoria Fisheries Organisation, *supra* note 35.

[114] *See also* Article 22(2) of the 2002 Framework Agreement on the Sava River Basin, *supra* note 2.

arrangements."[115] Allan and Wouters define "improved water governance" as, "an environment that facilitates the most effective implementation of both international and national water policy by national governments."[116] Following this definition it becomes evident that the procedural rules and mechanisms described in this chapter are essential to improving governance arrangements at the international watercourse level.

This chapter has shown that there is a growing willingness by States to adopt these procedural rules and mechanism relating to their international watercourses. Some of these rules and principles are firmly established as part of customary international law, such as the duty of cooperation, duty to give prior notification, the duty to exchange data and information between States, and the duty on State to resolve their disputes over international watercourses peacefully. Other mechanisms, such as joint institutions, enjoy a long history of usage because they provide the most effective structure in which States can cooperate over international watercourses. More recently adopted procedural rules and mechanisms provide even more sophisticated approaches to the governance of international watercourses. Perhaps the most significant of these recent developments is the inclusion of non-State parties, albeit in a limited capacity, as part of the process.

The effective implementation of the rule of equitable and reasonable use is heavily dependent on sound procedural rules and mechanisms which promote improved governance of international watercourses. Without these strengthened governance

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[115] *Keys of the Bonn Conference on Water – A Key to Sustainable Development,* Bonn, Germany, Dec. 4, 2001, *reprinted at* <http://www.water-2001.de/outcome/>, (visited Jun. 13, 2003).
[116] Allan, A. & Wouters, P.K., "What Role for Water Law in the "Good Governance" Debate?", 5(4) Water Resources Impact 5 (2003), at 6.

arrangements States would lack the cooperative framework by which to implement and adjust their uses of international watercourses in accordance with the rule of equitable and reasonable use. Procedural rules and mechanisms thus form the basis for avoiding disputes and strengthening cooperation over international watercourses.

CHAPTER SEVEN

A FRESH APPROACH: LESSONS LEARNT FROM THE LAW OF INTERNATIONAL WATERCOURSES

The purpose of this chapter will be to identify and draw upon the lesson learnt from the law of international watercourses. After revisiting chapters two through to four in order to highlight the problems with past attempts to develop international law in the field of sustainable development, this chapter will identify the lessons learnt from the analysis of the law of international watercourses carried out in chapters five and six. The chapter will conclude by outlining the foundations upon which a fresh approach to international law in the field of sustainable development could evolve.

7.1 Past approaches to "international" law in the field of sustainable development

Chapter two of this thesis concluded that sustainable development was a goal of the international community – that goal being to meet the needs of the present generation without compromising the ability of future generations to meet their needs. There is a certain tension between international law and sustainable development because, while sustainable development requires action at the international, regional, national and local levels, international law, as described in chapter one, is made by States, primarily for States, in order to regulate their relations with each other. Whereas no State would deny that it should promote the goal of sustainable development within a national context, there is widespread State reluctance, as evidenced in chapters three and four, to being

internationally accountable for failing to promote sustainable development at the purely national level. Chapter three showed that the attempts to develop an international law in the field of sustainable development have largely ignored this limiting factor. The WCED called for a Convention on Sustainable Development, "setting the sovereign rights and reciprocal responsibilities of all states",[117] and the IUCN Draft Covenant is intended as the basis on which a Convention on Sustainable Development could be negotiated.[118] However, if sovereign rights and responsibilities promoting sustainable development are to evolve they must be based upon international law. Accordingly, these sovereign rights and responsibilities must be founded upon current international law as identified by the sources. Rightly or wrongly this is how international law operates.

How then can international law be used to promote sustainable development? Is it possible to develop rules and principles which promote sustainable development while not unnecessarily encroaching on State sovereignty? What lessons can be learnt from the law of international watercourses?

7.2 Lessons learnt from the law of international watercourses

A study of the law of international watercourses has revealed how a system exists by which to reconcile competing economic, social and environmental interests over an international watercourse: the rule of equitable and reasonable use, and the procedural rules and mechanism which support its implementation. The way in which the law of

[117] WCED, *Our Common Future* (Oxford University Press, Oxford 1987), at 67.
[118] IUCN Draft Covenant on Environment and Development (2nd Ed. IUCN, Gland 2000), at ix-xviii.

international watercourses achieves this balancing process does indeed provide a number of useful lessons.

7.2.1 A flexible rule able to take into account all relevant factors and circumstances

While the inclusion of a number of substantive rules of similar importance within a legal system may lead to confusion and contradictions, in the case of the law of international watercourses a coherent approach is followed by only having one primary overarching substantive rule which governs all the various uses of an international watercourse.

What is more, the fact that the primary substantive rule is flexible enough to take into account all factors and circumstances means that scope of the rule is broad enough to cover all eventualities. An analysis of the rule of equitable and reasonable use has shown that adopting a flexible all encompassing approach is the only way in which the wide variety of economic, social and environmental issues can be reconciled. Due to the strong interrelationship between economic, social and environmental interests within a watercourse, affording one factor priority over another would be counterproductive. For example, giving economic uses priority over the environment could threaten the long-term viability of the resource, while always affording priority to the environment may place at risk populations dependent on the water for their survival.

In adopting a flexible approach which takes into account all factors and circumstances within a particular watercourse, the rule of equitable and reasonable use is capable of providing a normative standard which can be consistently applied regardless the diversity of factors and circumstances surrounding the world's international watercourses.

7.2.2 Protecting fundamental interests

A danger of applying a flexible rule which takes into account all relevant factors and circumstances is that it may be so general that it provides little guidance to States within a particular set of factors and circumstances. However, it has been shown in this thesis that the rule of equitable and reasonable use is still capable of protecting fundamental interests despite not affording priority to any one use. This thesis has shown that essential environmental and individual needs can still be protected under the rule of equitable and reasonable use without unnecessarily restricting other legitimate uses of an international watercourse. It has also been demonstrated that considerable guidance can be gained from a variety of sources when determining how to protect fundamental interests and balance other factors, such as past practice or other fields of law.

7.2.3 A threshold between national and international interest

Another important lesson to be learnt from the law of international watercourses is its ability to separate solely national concerns from international concerns. In applying the "conflict of uses" threshold to the rule of equitable and reasonable use it is possible to draw a line between what is solely a national concern and what is an international concern. Within the confines of a national territory, State's are at liberty to use an international watercourse as they deem fit so long as their use of the watercourse does not affect the rights of other States.

Despite the clear demarcation between national and international interests, the rule of equitable and reasonable use also encourages States to ensure that *all* their uses of an

international watercourse provide the maximum possible benefit while causing the least amount of harm, regardless of whether there is a conflict of use between States. This incentive is as a result of the increasing likelihood of a conflict of uses occurring, and the fact that only reasonable uses would be protected if a conflict were to arise. The notion of reasonableness has the advantage of having been "tried and tested" in many fields of law, and analogies can be drawn from past experiences.

7.2.4 Good governance essential for implementation

The effective implementation of a flexible substantive rule which takes into account all relevant factors and circumstances will only be possible if a sound framework for governance is established. Many of the essential components of a sound framework for governance in the context of international watercourses have a long tradition in the law of international watercourses. These rules and mechanisms, outlined in the previous chapter, not only form the basis for any cooperation between States over international watercourses, but also develop more sophisticated approaches to implementing equitable and reasonable use both in the short-term and the long-term. The ultimate success of the rule of equitable and reasonable use will be highly dependent of the appropriate procedural rules and mechanisms being adopted by States.

7.3 A Fresh Approach

For international law to play an effective role in promoting sustainable development it must be capable of reconciling competing economic, social and environmental interests while not unnecessarily encroaching on a State's right to exploit its own resources based

on its own developmental and environmental policies. The law of international watercourses achieves this by essentially providing a threshold for the application of the rules of equitable and reasonable use, that is, when there is a "conflict of uses." Can a similar threshold be used to demarcate between national interests and international interests in the promotion of sustainable development?

A possible approach would be to stipulate that a conflict of interest occurs where the economic, social or environmental needs of a State were not being met due to the activities of another State, or a group of States. The scope of the rule would therefore be wide. For example, a conflict of interest may occur where one State pollutes the environment of its neighbouring States, or where the trade policies of a particular State have a negative impact on the environmental interests of States, or where activities of one or more States adversely affect the global climate system, thus having an impact on all States.

Can the notion of reasonableness also be incorporated into the rule so as to provide a flexible and objective standard while not encroaching unnecessarily on State sovereignty? One method would be to introduce a condition that when determining whether there is a conflict of interest between States, only reasonable economic, social and environmental needs will be taken into account. Only State needs that contributed towards the constant improvement of the well-being of present and future generations would be considered reasonable. In providing that all economic, social or environmental needs be reasonable, the rule would introduce an incentive for States to ensure that their national

environmental and developmental policies promote sustainable development. This approach would not unnecessarily encroach on State sovereignty because States would be free to pursue their own developmental and environmental policies where there was no conflict of interest with other States.

Taking the law of international watercourses analogy one step further, where a conflict of interests were to arise between States, the conflict could be reconciled on the basis of equity, taking into account all relevant factors and circumstances. While no priority would be given to a particular need, special regard must be had to the economic and social needs of the poor and the protection of natural resources and ecosystems a basis for social and economic development. Other relevant factors would include the need to promote the sustainable use of natural resources, the elimination of unsustainable patterns of consumption and production, and the special needs and interests of developing countries.

In accordance with the above discussion, a draft of a rule which could act as the primary rule of international law in the field of sustainable development, would be as follows:

> "Where a State is unable to meet its reasonable economic, social or environmental needs due to a conflict of interest with one or more States, the conflict will be resolved on the basis of equity, taking into account, *inter alia*:
>
> (a) the protection of the natural environment, as a basis for social and economic development;
> (b) the sustainable use of natural resources;
> (b) the need to eliminate unsustainable patterns of production and consumption;

(c) the need to eradicate poverty;
(d) the special needs and interests of developing countries."

Reconciling the above rule with that of the sovereign right to natural resources rule would help to develop a coherent international law of sustainable development and have the advantage of being based on existing international law. A further draft rule should therefore be included providing that:

"States have, in accordance with the conflict of interest rule, the sovereign right to manage their own natural resources pursuant to their own environmental and developmental policies, and have a duty to respect the environment of other States or of areas beyond the limits of their national jurisdiction;

In particularly, States should take all appropriate measures to prevent significant environmental harm or at any event minimise the risk thereof;

In taking all appropriate measures States must:

(i) recognise that the degree of care expected of a State with well-developed economic, human and material resources and with highly evolved systems and structures of governance will be higher than a State which is not in such a position;
(ii) establish and enforce legal, administrative and technical measures sufficient to fulfil its obligations to other States, including assessing the environmental impact of activities which may have a significant adverse effect on the environment of other States or of areas beyond the limits of a State's jurisdiction;

(iii) adopt a precautionary approach to the prevention of environmental harm whereby a lack of scientific certainty is no reason to postpone action to avoid potentially serious or irreversible harm to the environment of other States or of areas beyond the limits of a State's jurisdiction;

(iv) ensure the sustainable use of renewable resources shared by two or more States."

The successful advancement of international law in the field of sustainable development, as shown by the law of international watercourses, should be supported through procedural rules and mechanisms capable of promoting good governance within the context of sustainable development. While the most appropriate procedural rules and mechanisms may vary within the particular context, the rules and mechanisms applied in support of the equitable and reasonable use provide guidance. Developing appropriate institutional arrangements can provide the structural basis upon which to foster cooperation and should also ensure greater coherence through institutional linkages. Effective implementation can also be promoted by applying the rules of prior notification and consultation, and the exchange of data and information, which are already part of customary international law. These rules should be supported by public participation which can, as shown in the context of international watercourses, be an effective mechanism for securing compliance. Finally, disputes settlement procedures should be available where States are unable to resolve their conflicts.

The intention of the proposing this fresh approach to international law in the field of sustainable development, based on the lessons learnt from the law of international watercourses, is that it would lay the foundations for developing more specific rights and

obligations relating to sustainable development, which would evolve into an international law of sustainable development. By providing a primary rule relating to sustainable development the fresh approach would also be able to co-ordinate and consolidate existing rules and principles relating to various aspects of sustainable development. A significant advantage of this approach over past attempts to develop international law in the field of sustainable development is that it is inspired by, and based upon, existing international law.

CHAPTER EIGHT

CONCLUSION

The purpose of this thesis, as set out in the introduction, was firstly to critically assess past attempts to develop international law in the field of sustainable development, and secondly to offer a fresh approach based upon lessons learnt from the law of international watercourses. The journey to find the answer has touched on many issues and also yielded some interesting observations.

The first chapter demonstrated that international law is still largely State based, and reliant on the traditional primary source of international law of treaty, custom and general principles of law. An assessment of international law must therefore understand how the latter sources can be identified.

The thesis then went on to explain how the concept of sustainable development evolved into a goal of the international community, that goal being the constant improvement in the well being of individuals – both present and future. An understanding of what is meant be sustainable development formed the basis of a study of its relationship with international law. However, the thesis has shown that attempts to formulate international law relating to sustainable development have failed to pay due regard to what States perceive international law to be. There is a failure to recognise, or accept, that States make international law. Failing to recognise the normative content of international law relating to sustainable development can lead to frustration due to a

misrepresentation of the rights and obligations of States. States may appear to be failing to comply with "obligations" contained in treaties even though they have discretion as to how such "obligations" should be implemented. A need to "refocus" international law in the field of sustainable development, so that it better reflects what States perceive international law to be is fundamental to its successful evolution. In so doing, it will then be possible to build on strong rather than weak or non-existent foundations.

A study of the law of international watercourses illustrated that an effective mechanism exists by which States can reconcile their competing claims, while also safeguarding the long term viability of a shared resource. The rule of equitable and reasonable use, coupled with procedural rules, is the basis on which to foster cooperation over international watercourses. Although often misunderstood, the law of international watercourses can ensure that the needs of States can be met whilst also safeguarding the ecosystem of the international watercourse and vital human needs. The study has also shown that the procedural mechanisms that support the rule of equitable and reasonable use provide an effective means for allocation, and reallocation, while ensuring for the long term viability of the resource. In itself, the study of the law of international watercourses therefore demonstrated how the law of international watercourses can make a significant contribution to addressing the world water crisis.

It has also been shown how the law of international watercourses can provide a conceptual framework by which to develop an international law of sustainable development. This legal framework should adopt a two pronged approach: establish a

comprehensive substantive rule which takes all relevant factors and circumstances into account when reconciling a "conflict of interest" between States; and introduce appropriate procedural rules and mechanisms for implementation and compliance.

Adopting an effective legal framework for promoting sustainable development at the international level will not provide a complete solution to the burgeoning economic, social and environmental issues of the day, but it can make a significant contribution. A legal framework for reconciling the competing economic, social and environmental State interests can at the least promote the goal of sustainable development. Fortunately, designing such a legal framework is not as complicated as it at first might seem. In fact, the solution already exists in a different guise - the law of international watercourses - why not use it?

ANNEX I

1997 CONVENTION ON THE LAW OF THE NON-NAVIGATIONAL USES OF INTERNATIONAL WATERCOURSES

The Parties to the present Convention,

Conscious of the importance of international watercourses and the non-navigational uses thereof in many regions of the world,

Having in mind Article 13, paragraph 1 (a), of the Charter of the United Nations, which provides that the General Assembly shall initiate studies and make recommendations for the purpose of encouraging the progressive development of international law and its codification,

Considering that successful codification and progressive development of rules of international law regarding non-navigational uses of international watercourses would assist in promoting and implementing the purposes and principles set forth in Articles 1 and 2 of the Charter of the United Nations,

Taking into account the problems affecting many international watercourses resulting from, among other things, increasing demands and pollution,

Expressing the conviction that a framework convention will ensure the utilization, development, conservation, management and protection of international watercourses and the promotion of the optimal and sustainable utilization thereof for present and future generations

Affirming the importance of international cooperation and good neighbourliness in this field,

Aware of the special situation and needs of developing countries,

Recalling the principles and recommendations adopted by the United Nations Conference on Environment and Development of 1992 in the Rio Declaration and Agenda 21,

Recalling also the existing bilateral and multilateral agreements regarding the non-navigational uses of international watercourses,

Mindful of the valuable contribution of international organizations, both governmental and non-governmental, to the codification and progressive development of international law in this field,

Appreciative of the work carried out by the International Law Commission on the law of the non-navigational uses of international watercourses,

Bearing in mind United Nations General Assembly resolution 49/52 of 9 December 1994,

Have agreed as follows:

PART I. INTRODUCTION

Article 1 - Scope of the present Convention

(1) The present Convention applies to uses of international watercourses and of their waters for purposes other than navigation and to measures of protection, preservation and management related to the uses of those watercourses and their waters.

(2) The uses of international watercourses for navigation is not within the scope of the present Convention except insofar as other uses affect navigation or are affected by navigation.

Article 2 – Use of Terms

For the purposes of the present Convention:

(a) "Watercourse" means a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus;

(b) "International watercourse" means a watercourse, parts of which are situated in different States;

(c) "Watercourse State" means a State Party to the present Convention in whose territory part of an international watercourse is situated, or a Party that is a regional economic integration organization, in the territory of one or more of whose Member States part of an international watercourse is situated;

(d) "Regional economic integration organization" means an organization constituted by sovereign States of a given region, to which its member States have transferred competence in respect of matters governed by this Convention and which has been duly authorized in accordance with its internal procedures, to sign, ratify, accept, approve or accede to it.

Article 3 – Watercourse Agreements

(1) In the absence of an agreement to the contrary, nothing in the present Convention shall affect the rights or obligations of a watercourse State arising from agreements in force for it on the date on which it became a party to the present Convention.

(2) Notwithstanding the provisions of paragraph 1, parties to agreements referred to in paragraph 1 may, where necessary, consider harmonizing such agreements with the basic principles of the present Convention.

(3) Watercourse States may enter into one or more agreements, hereinafter referred to as "watercourse agreements", which apply and adjust the provisions of the present Convention to the characteristics and uses of a particular international watercourse or part thereof.

(4) Where a watercourse agreement is concluded between two or more watercourse States, it shall define the waters to which it applies. Such an agreement may be entered into with respect to an entire international watercourse or any part thereof or a particular project programme or use except insofar as the agreement adversely affects, to a significant extent, the use by one or more other watercourse States of the waters of the watercourse, without their express consent.

(5) Where a watercourse State considers that adjustment and application of the provisions of the present Convention is required because of the characteristics and uses of a particular international watercourse, watercourse States shall consult with a view to negotiating in good faith for the purpose of concluding a watercourse agreement or agreements.

(6) Where some but not all watercourse States to a particular international watercourse are parties to an agreement, nothing in such agreement shall affect the rights or obligations under the present Convention of watercourse States that are not parties to such an agreement.

Article 4 - Parties to watercourse agreements

(1) Every watercourse State is entitled to participate in the negotiation of and to become a party to any watercourse agreement that applies to the entire international watercourse, as well as to participate in any relevant consultations.

(2) A watercourse State whose use of an international watercourse may be affected to a significant extent by the implementation of a proposed watercourse agreement that applies only to a part of the watercourse or to a particular project, programme or use is entitled to participate in consultations on such an agreement and, where appropriate, in the negotiation thereof in good faith with a view to becoming a party thereto, to the extent that its use is thereby affected.

PART II. GENERAL PRINCIPLES

Article 5 - Equitable and reasonable utilization and participation

(1) Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.

(2) Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.

Article 6 - Factors relevant to equitable and reasonable utilization

(1) Utilization of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:

(a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;

(b) The social and economic needs of the watercourse States concerned;

(c) The population dependent on the watercourse in each watercourse State;

(d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;

(e) Existing and potential uses of the watercourse;

(f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;

(g) The availability of alternatives, of comparable value, to a particular planned or existing use.

(2) In the application of article 5 or paragraph 1 of this article, watercourse States concerned shall, when the need arises, enter into consultations in a spirit of cooperation.

(3) The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.

Article 7 - Obligation not to cause significant harm

(1) Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.

(2) Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

Article 8 - General obligation to cooperate

(1) Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of an international watercourse.

(2) In determining the manner of such cooperation, watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation on relevant measures and procedures in the light of experience gained through cooperation in existing joint mechanisms and commissions in various regions.

Article 9 - Regular exchange of data and information

(1) Pursuant to article 8, watercourse States shall on a regular basis exchange readily available data and information on the condition of the watercourse, in particular that of a hydrological, meteorological, hydrogeological and ecological nature and related to the water quality as well as related forecasts.

(2) If a watercourse State is requested by another watercourse State to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information.

(3) Watercourse States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner which facilitates its utilization by the other watercourse States to which it is communicated.

Article 10 - Relationship between different kinds of uses

(1) In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.

(2) In the event of a conflict between uses of an international watercourse, it shall be resolved with reference to articles 5 to 7, with special regard being given to the requirements of vital human needs.

PART III. PLANNED MEASURES

Article 11 - Information concerning planned measures

Watercourse States shall exchange information and consult each other and, if necessary, negotiate on the possible effects of planned measures on the condition of an international watercourse.

Article 12 - Notification concerning planned measures with possible adverse effects

Before a watercourse State implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States, it shall provide those States with timely notification thereof. Such notification shall be accompanied by available technical data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of the planned measures.

Article 13 - Period for reply to notification

Unless otherwise agreed:

(a) A watercourse State providing a notification under article 12 shall allow the notified States a period of six months within which to study and evaluate the possible effects of the planned measures and to communicate the findings to it;

(b) This period shall, at the request of a notified State for which the evaluation of the planned measures poses special difficulty, be extended for a period of six months.

Article 14 - Obligations of the notifying State during the period for reply

During the period referred to in article 13, the notifying State:

(a) Shall cooperate with the notified States by providing them, on request, with any additional data and information that is available and necessary for an accurate evaluation; and

(b) Shall not implement or permit the implementation of the planned measures without the consent of the notified States.

Article 15 - Reply to notification

The notified States shall communicate their findings to the notifying State as early as possible within the period applicable pursuant to article 13. If a notified State finds that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 7, it shall attach to its finding a documented explanation setting forth the reasons for the finding.

Article 16 - Absence of reply to notification

(1) If, within the period applicable pursuant to article 13, the notifying State receives no communication under article 15, it may, subject to its obligations under articles 5 and 7, proceed with the implementation of the planned measures, in accordance with the notification and any other data and information provided to the notified States.

(2) Any claim to compensation by a notified State which has failed to reply within the period applicable pursuant to article 13 may be offset by the costs incurred by the notifying State for action undertaken after the expiration of the time for a reply which would not have been undertaken if the notified State had objected within that period.

Article 17 - Consultations and negotiations concerning planned measures

(1) If a communication is made under article 15 that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 7, the notifying State and the State making the communication shall enter into consultations and, if necessary, negotiations with a view to arriving at an equitable resolution of the situation.

(2) The consultations and negotiations shall be conducted on the basis that each State must in good faith pay reasonable regard to the rights and legitimate interests of the other State.

(3) During the course of the consultations and negotiations, the notifying State shall, if so requested by the notified State at the time it makes the communication, refrain from implementing or permitting the implementation of the planned measures for a period of six months unless otherwise agreed.

Article 18 - Procedures in the absence of notification

(1) If a watercourse State has reasonable grounds to believe that another watercourse State is planning measures that may have a significant adverse effect upon it, the former State may request the latter to apply the provisions of article 12. The request shall be accompanied by a documented explanation setting forth its grounds.

(2) In the event that the State planning the measures nevertheless finds that it is not under an obligation to provide a notification under article 12, it shall so inform the other State, providing a documented explanation setting forth the reasons for such finding. If this finding does not satisfy the other State, the two States shall, at the request of that other State, promptly enter into consultations and negotiations in the manner indicated in paragraphs 1 and 2 of article 17.

(3) During the course of the consultations and negotiations, the State planning the measures shall, if so requested by the other State at the time it requests the initiation of consultations and negotiations, refrain from implementing or permitting the implementation of those measures for a period of six months unless otherwise agreed.

Article 19 - Urgent implementation of planned measures

(1) In the event that the implementation of planned measures is of the utmost urgency in order to protect public health, public safety or other equally important interests, the State planning the measures may, subject to articles 5 and 7, immediately proceed to implementation, notwithstanding the provisions of article 14 and paragraph 3 of article 17.

(2) In such case, a formal declaration of the urgency of the measures shall be communicated without delay to the other watercourse States referred to in article 12 together with the relevant data and information.

(3) The State planning the measures shall, at the request of any of the States referred to in paragraph 2, promptly enter into consultations and negotiations with it in the manner indicated in paragraphs 1 and 2 of article 17.

PART IV. PROTECTION, PRESERVATION AND MANAGEMENT

Article 20 - Protection and preservation of ecosystems

Watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses.

Article 21 - Prevention, reduction and control of pollution

(1) For the purpose of this article, "pollution of an international watercourse" means any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.

(2) Watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse. Watercourse States shall take steps to harmonize their policies in this connection.

(3) Watercourse States shall, at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as:

(a) Setting joint water quality objectives and criteria;

(b) Establishing techniques and practices to address pollution from point and non-point sources;

(c) Establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.

Article 22 - Introduction of alien or new species

Watercourse States shall take all measures necessary to prevent the introduction of species, alien or new, into an international watercourse which may have effects detrimental to the ecosystem of the watercourse resulting in significant harm to other watercourse States.

Article 23 - Protection and preservation of the marine environment

Watercourse States shall, individually and, where appropriate, in cooperation with other States, take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment, including estuaries, taking into account generally accepted international rules and standards.

Article 24 - Management

(1) Watercourse States shall, at the request of any of them, enter into consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism.

(2) For the purposes of this article, "management" refers, in particular, to:

(a) Planning the sustainable development of an international watercourse and providing for the implementation of any plans adopted; and

(b) otherwise promoting the rational and optimal utilization, protection and control of the watercourse.

Article 25 - Regulation

(1) Watercourse States shall cooperate, where appropriate, to respond to needs or opportunities for regulation of the flow of the waters of an international watercourse.

(2) Unless otherwise agreed, watercourse States shall participate on an equitable basis in the construction and maintenance or defrayal of the costs of such regulation works as they may have agreed to undertake.

(3) For the purposes of this article, "regulation" means the use of hydraulic works or any other continuing measure to alter, vary or otherwise control the flow of the waters of an international watercourse.

Article 26 - Installations

(1) Watercourse States shall, within their respective territories, employ their best efforts to maintain and protect installations, facilities and other works related to an international watercourse.

(2) Watercourse States shall, at the request of any of them which has reasonable grounds to believe that it may suffer significant adverse effects, enter into consultations with regard to:

(a) The safe operation and maintenance of installations, facilities or other works related to an international watercourse; and

(b) The protection of installations, facilities or other works from wilful or negligent acts or the forces of nature.

PART V. HARMFUL CONDITIONS AND EMERGENCY SITUATIONS

Article 27 - Prevention and mitigation of harmful conditions

Watercourse States shall, individually and, where appropriate, jointly, take all appropriate measures to prevent or mitigate conditions related to an international watercourse that may be harmful to other watercourse States, whether resulting from natural causes or human conduct, such as flood or ice conditions, water-borne diseases, siltation, erosion, salt-water intrusion, drought or desertification.

Article 28 - Emergency situations

(1) For the purposes of this article, "emergency" means a situation that causes, or poses an imminent threat of causing, serious harm to watercourse States or other States and that results suddenly from natural causes, such as floods, the breaking up of ice, landslides or earthquakes, or from human conduct, such as industrial accidents.

(2) A watercourse State shall, without delay and by the most expeditious means available, notify other potentially affected States and competent international organizations of any emergency originating within its territory.

(3) A watercourse State within whose territory an emergency originates shall, in cooperation with potentially affected States and, where appropriate, competent international organizations, immediately take all practicable measures necessitated by the circumstances to prevent, mitigate and eliminate harmful effects of the emergency.

(4) When necessary, watercourse States shall jointly develop contingency plans for responding to emergencies, in cooperation, where appropriate, with other potentially affected States and competent international organizations.

PART VI. MISCELLANEOUS PROVISIONS

Article 29 - International watercourses and installations in time of armed conflict

International watercourses and related installations, facilities and other works shall enjoy the protection accorded by the principles and rules of international law applicable in international and non-international armed conflict and shall not be used in violation of those principles and rules.

Article 30 - Indirect procedures

In cases where there are serious obstacles to direct contacts between watercourse States, the States concerned shall fulfil their obligations of cooperation provided for in the present Convention, including exchange of data and information, notification, communication, consultations and negotiations, through any indirect procedure accepted by them.

Article 31 - Data and information vital to national defence or security

Nothing in the present Convention obliges a watercourse State to provide data or information vital to its national defence or security. Nevertheless, that State shall cooperate in good faith with the other watercourse States with a view to providing as much information as possible under the circumstances.

Article 32 - Non-discrimination

Unless the watercourse States concerned have agreed otherwise for the protection of the interests of persons, natural or juridical, who have suffered or are under a serious threat of suffering significant transboundary harm as a result of activities related to an international watercourse, a watercourse State shall not discriminate on the basis of nationality or residence or place where the injury occurred, in granting to such persons, in accordance with its legal system, access to judicial or other procedures, or a right to claim compensation or other relief in respect of significant harm caused by such activities carried on in its territory.

Article 33 - Settlement of disputes

(1) In the event of a dispute between two or more Parties concerning the interpretation or application of the present Convention, the Parties concerned shall, in the absence of an applicable agreement between them, seek a settlement of the dispute by peaceful means in accordance with the following provisions.

(2) If the Parties concerned cannot reach agreement by negotiation requested by one of them, they may jointly seek the good offices of, or request mediation or conciliation by, a third party, or make use, as appropriate, of any joint watercourse institutions that may have been established by them or agree to submit the dispute to arbitration or to the International Court of Justice.

(3) Subject to the operation of paragraph 10, if after six months from the time of the request for negotiations referred to in paragraph 2, the Parties concerned have not been able to settle their dispute through negotiation or any other means referred to in paragraph 2, the dispute shall be submitted, at the request of any of the parties to the dispute, to impartial fact-finding in accordance with paragraphs 4 to 9, unless the Parties otherwise agree.

(4) A Fact-finding Commission shall be established, composed of one member nominated by each Party concerned and in addition a member not having the nationality of any of the Parties concerned chosen by the nominated members who shall serve as Chairman.

(5) If the members nominated by the Parties are unable to agree on a Chairman within three months of the request for the establishment of the Commission, any Party concerned may request the Secretary-General of the United Nations to appoint the Chairman who shall not have the nationality of any of the parties to the dispute or of any riparian State of the watercourse concerned. If one of the Parties fails to nominate a member within three months of the initial request pursuant to paragraph 3, any other Party concerned may request the Secretary-General of the United Nations to appoint a person who shall not have the nationality of any of the parties to the dispute or of any riparian State of the watercourse concerned. The person so appointed shall constitute a single-member Commission.

(6) The Commission shall determine its own procedure.

(7) The Parties concerned have the obligation to provide the Commission with such information as it may require and, on request, to permit the Commission to have access to their respective territory and to inspect any facilities, plant, equipment, construction or natural feature relevant for the purpose of its inquiry.

(8) The Commission shall adopt its report by a majority vote, unless it is a single-member Commission, and shall submit that report to the Parties concerned setting forth its findings and the reasons therefor and such recommendations as it deems appropriate for an equitable solution of the dispute, which the Parties concerned shall consider in good faith.

(9) The expenses of the Commission shall be borne equally by the Parties concerned

(10) When ratifying, accepting, approving or acceding to the present Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute not resolved in accordance with paragraph 2, it recognizes as compulsory ipso facto and without special agreement in relation to any Party accepting the same obligation:

(a) Submission of the dispute to the International Court of Justice; and/or

(b) Arbitration by an arbitral tribunal established and operating, 'unless the parties to the dispute otherwise agreed, in accordance with the procedure laid down in the annex to the present Convention.

A Party which is a regional economic integration organization may make a declaration with like effect in relation to arbitration in accordance with subparagraph (b).

PART VII. FINAL CLAUSES

Article 34 - Signature

The present Convention shall be open for signature by all States and by regional economic integration organizations from ... until ... at United Nations Headquarters in New York.

Article 35 - Ratification, acceptance, approval or accession

(1) The present Convention is subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations. The instruments of ratification, acceptance, approval or accession shall be deposited with the Secretary-General of the United Nations.

(2) Any regional economic integration organization which becomes a Party to this Convention without any of its member States being a Party shall be bound by all the obligations under the Convention. In the case of such organizations, one or more of whose member States is a Party to this Convention, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under the Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under the Convention concurrently.

(3) In their instruments of ratification, acceptance, approval or accession, the regional economic integration organizations shall declare the extent of their competence with respect to the matters

governed by the Convention. These organizations shall also inform the Secretary-General of the United Nations of any substantial modification in the extent of their competence.

Article 36 - Entry into force

(1) The present Convention shall enter into force on the ninetieth day following the date of deposit of the thirty-fifth instrument of ratification, acceptance, approval or accession with the Secretary-General of the United Nations.

(2) For each State or regional economic integration organization that ratifies, accepts or approves the Convention or accedes thereto after the deposit of the thirty-fifth instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the ninetieth day after the deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.

(3) For the purposes of paragraphs 1 and 2, any instrument deposited by a regional economic integration organization shall not be counted as additional those deposited by States.

Article 37 - Authentic texts

The original of the present Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF the undersigned plenipotentiaries, being duly authorized thereto, have signed this Convention.

DONE at New York, this _____ day of one thousand nine hundred and ninety-seven.

ANNEX - ARBITRATION

Article 1

Unless the parties to the dispute otherwise agree, the arbitration pursuant to article 33 of the Convention shall take place in accordance with articles 2 to 14 of the present annex.

Article 2

The claimant party shall notify the respondent party that it is referring a dispute to arbitration pursuant to article 33 of the Convention. The notification shall state the subject matter of arbitration and include, in particular, the articles of the Convention, the interpretation or application of which are at issue. If the parties do not agree on the subject matter of the dispute, the arbitral tribunal shall determine the subject matter.

Article 3

(1) In disputes between two parties, the arbitral tribunal shall consist of three members. Each of the parties to the dispute shall appoint an arbitrator and the two arbitrators so appointed shall designate by common agreement the third arbitrator, who shall be the Chairman of the tribunal. The latter shall not' be a national of one of the parties to the dispute or of any riparian State of the

watercourse concerned, nor have his or her usual place of residence in the territory of one of these parties or such riparian State, nor have dealt with the case in any other capacity.

(2) In disputes between more than two parties, parties in the same interest shall appoint one arbitrator jointly by agreement.

(3) Any vacancy shall be filled in the manner prescribed for the initial appointment.

Article 4

(1) If the Chairman of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the President of the International Court of Justice shall, at the request of a party, designate the Chairman within a further two-month period.

(2) If one of the parties to the dispute does not appoint an arbitrator within two months of receipt of the request, the other party may inform the President of the International Court of Justice, who shall make the designation within a further two-month period.

Article 5

The arbitral tribunal shall render its decisions in accordance with the provisions of this Convention and international law.

Article 6

Unless the parties to the dispute otherwise agree, the arbitral tribunal shall determine its own rules of procedure.

Article 7

The arbitral tribunal may, at the request of one of the Parties, recommend essential interim measures of protection.

Article 8

(1) The parties to the dispute shall facilitate the work of the arbitral tribunal and, in particular, using all means at their disposal, shall:

(a) Provide it with all relevant documents, information and facilities; and

(b) Enable it', when necessary, to call witnesses or experts and receive their evidence.

(2) The parties and the arbitrators are under an obligation to protect the confidentiality of any information they receive in confidence during the proceedings of the arbitral tribunal.

Article 9

Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the costs of the tribunal shall be borne by the parties to the dispute in equal shares. The tribunal shall keep a record of all its costs, and shall furnish a final statement thereof to the parties.

Article 10

Any Party that has an interest of a legal nature in the subject matter of the dispute which may be affected by the decision in the case, may intervene in the proceedings with the consent of the tribunal.

Article 11

The tribunal may hear and determine counterclaims arising directly out of the subject matter of the dispute.

Article 12

Decisions both on procedure and substance of the arbitral tribunal shall be taken by a majority vote of its members.

Article 13

If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to make its award. Absence of a party or a failure of a party to defend its case shall not constitute a bar to the proceedings. Before rendering its final decision, the arbitral tribunal must satisfy itself that the claim is well founded in fact and law.

Article 14

(1) The tribunal shall render its final decision within five months of the date on which it is fully constituted unless it finds it necessary to extend the time limit for a period which should not exceed five more months.

(2) The final decision of the arbitral tribunal shall be confined to the subject matter of the dispute and shall state the reasons on which it is based'. It shall contain the names of the members who have participated and the date of the final decision. Any member of the tribunal may attach a separate or dissenting opinion to the final decision.

(3) The award shall be binding on the parties to the dispute. It shall be without appeal unless the parties to the dispute have agreed in advance to an appellate procedure.

(4) Any controversy which may arise between the parties to the dispute as regards the interpretation or manner of implementation of the final decision may be submitted by either party for decision to the arbitral tribunal which rendered it.

ANNEX II

2002 ILA NEW DELHI DECLARATION OF PRINCIPLES OF INTERNATIONAL LAW RELATING TO SUSTAINABLE DEVELOPMENT

The 70th Conference of the International Law Association, held in New Delhi, India, 2-6 April 2002,

Noting that sustainable development is now widely accepted as a global objective and that the concept has been amply recognized in various international and national legal instruments, including treaty law and jurisprudence at international and national levels,

Emphasising that sustainable development is a matter of common concern both to developing and industrialized countries and that, as such, it should be integrated into all relevant fields of policy in order to realize the goals of environmental protection, development and respect for human rights, emphasizing the critical relevance of the gender dimension in all these areas and recognizing the need to ensure practical and effective implementation,

Taking the view that there is a need for a comprehensive international law perspective on integration of social, economic, financial and environmental objectives and activities and that enhanced attention should be paid to the interests and needs of developing countries, particularly least developed countries, and those adversely affected by environmental, social and developmental considerations,

Recalling that in its Report on *Our Common Future* (1987), the World Commission on Environment and Development identified the objective of sustainable development as being '…to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs',

Concerned about growing economic and social inequalities between and within States as well as about the ability of many developing countries, particularly least developed countries, to participate in the global economy,

Recognising the need to further develop international law in the field of sustainable development, with a view to according due weight to both the developmental and environmental concerns, in order to achieve a balanced and comprehensive international law on sustainable development, as called for in Principle 27 of the Rio Declaration and Chapter 39 of Agenda 21 of the UN Conference on Environment and Development as well as in the various resolutions on legal aspects of sustainable development of the International Law Association,

Affirming that consideration should be given to the interaction of States, intergovernmental organizations, peoples and individuals, industrial concerns and other non-governmental organizations as participants in multilateral development co-operation,

Aware of the concern expressed by the UN General Assembly during its 19th Special Session in 1997 to review progress achieved since the 1992 UN Conference on Environment and Development that 'the overall trends for sustainable development are worse today than they were in 1992'; and of the General Assembly's call 'to continue the progressive development and, as and where appropriate, codification of international law related to sustainable development',

Recognising that the forthcoming World Summit on Sustainable Development, convened by the United Nations General Assembly in Johannesburg, South Africa, 26 August-4 September 2002, provides an important opportunity for addressing the role of international law in the pursuance of sustainable development,

Reaffirming the ILA's Seoul Declaration on Progressive Development of Principles of Public International Law Relating to a New International Economic Order, as adopted by the 62nd Conference of the International Law Association held in Seoul in 1986,

Taking into account the United Nations General Assembly Declaration on the Right to Development of 1986,

Taking further into account the Rio Declaration on Environment and Development and related documents ensuing from the 1992 UN Conference on Environment and Development, as well as the final documents resulting from the series of world conferences on social progress for development (Copenhagen, 1993), human rights (Vienna, 1993), population and development (Cairo, 1994), small islands states and sustainable development (Barbados, 1994), women and development (Beijing, 1995), least-developed countries (Brussels, 2001) and financing for development (Monterrey, 2002), respectively,

Expresses the view that the objective of sustainable development involves a comprehensive and integrated approach to economic, social and political processes, which aims at the sustainable use of natural resources of the Earth and the protection of the environment on which nature and human life as well as social and economic development depend and which seeks to realize the right of all human beings to an adequate living standard on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom, with due regard to the needs and interests of future generations,

Is of the opinion that the realization of the international bill of human rights, comprising economic, social and cultural rights, civil and political rights and peoples' rights, is central to the pursuance of sustainable development,

Considers that the application and, where relevant, consolidation and further development of the following principles of international law relevant to the activities of all actors involved would be instrumental in pursuing the objective of sustainable development in an effective way:

1. The duty of States to ensure sustainable use of natural resources

1.1 It is a well-established principle that, in accordance with international law, all States have the sovereign right to manage their own natural resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause significant damage to the environment of other States or of areas beyond the limits of national jurisdiction.

1.2 States are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their peoples, with particular regard for the rights of indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems. States must take into account the needs of future generations in determining the rate of use of natural resources. All relevant actors (including States, industrial concerns and other components of civil society) are under a duty to avoid wasteful use of natural resources and promote waste minimization policies.

1.3 The protection, preservation and enhancement of the natural environment, particularly the proper management of climate system, biological diversity and fauna and flora of the Earth, are the common concern of humankind. The resources of outer space and celestial bodies and of the sea-bed, ocean floor and subsoil thereof beyond the limits of national jurisdiction are the common heritage of humankind.

2. The principle of equity and the eradication of poverty

2.1 The principle of equity is central to the attainment of sustainable development. It refers to both *inter-generational equity* (the right of future generations to enjoy a fair level of the common patrimony) and *intra-generational equity* (the right of all peoples within the current generation of fair access to the current generation's entitlement to the Earth's natural resources).

2.2 The present generation has a right to use and enjoy the resources of the Earth but is under an obligation to take into account the long-term impact of its activities and to sustain the resource base and the global environment for the benefit of future generations of humankind. 'Benefit' in this context is to be understood in its broadest meaning as including, *inter alia*, economic, environmental, social and intrinsic benefit.

2.3 The right to development must be implemented so as to meet developmental and environmental needs of present and future generations in a sustainable and equitable manner.

This includes the duty to co-operate for the eradication of poverty in accordance with Chapter IX on International Economic and Social Co-operation of the Charter of the United Nations and the Rio Declaration on Environment and Development as well as the

duty to co-operate for global sustainable development and the attainment of equity in the development opportunities of developed and developing countries.

2.4 Whilst it is the primary responsibility of the State to aim for conditions of equity within its own population and to ensure, as a minimum, the eradication of poverty, all States which are in a position to do so have a further responsibility, as recognized by the Charter of the United Nations and the Millennium Declaration of the United Nations, to assist States in achieving this objective.

3. The principle of common but differentiated responsibilities

3.1 States and other relevant actors have common but differentiated responsibilities. All States are under a duty to co-operate in the achievement of global sustainable development and the protection of the environment. International organizations, corporations (including in particular transnational corporations), non-governmental organizations and civil society should co-operate in and contribute to this global partnership. Corporations have also responsibilities pursuant to the polluter-pays principle.

3.2 Differentiation of responsibilities, whilst principally based on the contribution that a State has made to the emergence of environmental problems, must also take into account the economic and developmental situation of the State, in accordance with paragraph 3.3.

3.3 The special needs and interests of developing countries and of countries with economies in transition, with particular regard to least developed countries and those affected adversely by environmental, social and developmental considerations, should be recognized.

3.4 Developed countries bear a special burden of responsibility in reducing and eliminating unsustainable patterns of production and consumption and in contributing to capacity-building in developing countries, *inter alia* by providing financial assistance and access to environmentally sound technology. In particular, developed countries should play a leading role and assume primary responsibility in matters of relevance to sustainable development.

4. The principle of the precautionary approach to human health, natural resources and ecosystems

4.1 A precautionary approach is central to sustainable development in that it commits States, international organizations and the civil society, particularly the scientific and business communities, to avoid human activity which may cause significant harm to human health, natural resources or ecosystems, including in the light of scientific uncertainty.

4.2 Sustainable development requires that a precautionary approach with regard to human health, environmental protection and sustainable utilization of natural resources should

include:

(a) accountability for harm caused (including, where appropriate, State responsibility);

(b) planning based on clear criteria and well-defined goals;

(c) consideration in an environmental impact assessment of all possible means to achieve an objective (including, in certain instances, not proceeding with an envisaged activity); and

(d) in respect of activities which may cause serious long-term or irreversible harm, establishing an appropriate burden of proof on the person or persons carrying out (or intending to carry out) the activity.

4.3 Decision-making processes should always endorse a precautionary approach to risk management and in particular should include the adoption of appropriate precautionary measures.

4.4 Precautionary measures should be based on up-to-date and independent scientific judgment and be transparent. They should not result in economic protectionism.

Transparent structures should be established which involve all interested parties, including non-state actors, in the consultation process. Appropriate review by a judicial or administrative body should be available.

5. The principle of public participation and access to information and justice

5.1 Public participation is essential to sustainable development and good governance in that it is a condition for responsive, transparent and accountable governments as well a condition for the active engagement of equally responsive, transparent and accountable civil society organizations, including industrial concerns and trade unions. The vital role of women in sustainable development should be recognized.

5.2 Public participation in the context of sustainable development requires effective protection of the human right to hold and express opinions and to seek, receive and impart ideas. It also requires a right of access to appropriate, comprehensible and timely information held by governments and industrial concerns on economic and social policies regarding the sustainable use of natural resources and the protection of the environment, without imposing undue financial burdens upon the applicants and with due consideration for privacy and adequate protection of business confidentiality.

5.3 The empowerment of peoples in the context of sustainable development requires access to effective judicial or administrative procedures in the State where the measure has been taken to challenge such measure and to claim compensation. States should ensure that where transboundary harm has been, or is likely to be, caused, individuals and

peoples affected have non-discriminatory access to the same judicial and administrative procedures as would individuals and peoples of the State in which the harm is caused.

6. The principle of good governance

6.1 The principle of good governance is essential to the progressive development and codification of international law relating to sustainable development. It commits States and international organizations:

(a) to adopt democratic and transparent decision-making procedures and financial accountability;

(b) to take effective measures to combat official or other corruption;

(c) to respect the principle of due process in their procedures and to observe the rule of law and human rights; and

(d) to implement a public procurement approach according to the WTO Code on Public Procurement.

6.2 Civil society and non-governmental organizations have a right to good governance by States and international organizations. Non-state actors should be subject to internal democratic governance and to effective accountability.

6.3 Good governance requires full respect for the principles of the 1992 Rio Declaration on Environment and Development as well as the full participation of women in all levels of decision-making. Good governance also calls for corporate social responsibility and socially responsible investments as conditions for the existence of a global market aimed at a fair distribution of wealth among and within communities.

7. The principle of integration and interrelationship, in particular in relation to human rights and social, economic and environmental objectives

7.1 The principle of integration reflects the interdependence of social, economic, financial, environmental and human rights aspects of principles and rules of international law relating to sustainable development as well as of the interdependence of the needs of current and future generations of humankind.

7.2 All levels of governance – global, regional, national, sub-national and local – and all sectors of society should implement the integration principle, which is essential to the achievement of sustainable development.

7.3 States should strive to resolve apparent conflicts between competing economic, financial, social and environmental considerations, whether through existing institutions or through the establishment of appropriate new institutions.

7.4 In their interpretation and application, the above principles are interrelated and each of them should be construed in the context of the other principles of this Declaration.

Nothing in this Declaration shall be construed as prejudicing in any manner the provisions of the Charter of the United Nations and the rights of peoples under that Charter.

NEW DELHI, 6 APRIL 2002.

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